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ABSTRACT

To investigate how Mexican-American students constructed meaning from English texts when engaged in reading and writing activities, a study examined 12 fifth grade Mexican-American students who lived in a "barrio" with literacy in both Spanish and English. The aim was to tap the envisionments (text interpretations or understandings, and expectations of what a particular text will include) students developed over time. During a series of research sessions, students read four passages--two in English and two in Spanish--in two genres, story and report. In each session students responded to envisionment and probing questions, gave oral retellings of the passages at various points, and wrote story summaries. Bilingual researchers conducted the sessions, and students were told to use either language--throughout the sessions, researchers mirrored the students' language lead. Findings indicated that good reading strategies made a difference in students' text comprehension in both languages, and that students' familiarity with genre affected their ability to build appropriate meanings. Also, question types affected students' ability to communicate what they understood. Finally, all students exhibited the ability to gain meaning from phrases in context and to explain what they meant, although the better envisionment makers provided more "school like" explanations. And all students exhibited greater comprehension of the English texts than would be expected based on reading comprehension test scores. (Eleven tables are included, and a student interview form, reading passages, envisionment questions, probing questions, tree diagrams for analysis of recalls, and 25 references are appended.) (MM)

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Meaning Construction in School Reading Tasks:
A Study of Mexican-American Students

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Project Report to the Spencer Foundation

June 1988

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Meaning Construction in School Reading Tasks: A Study of Mexican-American Students

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One of the major challenges facing educators today is how to address the persistently low reading achievement (and high drop out rate) for traditionally at-risk minority groups. These groups are linguistically and culturally diverse, and our understanding of literacy learning among these populations is limited. This study describes the knowledge sources Mexican-American students use to construct meaning during school reading tasks. This group was selected because a) the rates of school failure and high school drop out are extraordinarily high (41% of California's 9th grade Mexican-American students are not expected to complete high school [Rumberger, 1983]) and b) despite a rise in reading achievement, the nation's Hispanic 17-year-olds still read only about as well as White 13-year-olds (NAEP, 1985). And Hispanics are the youngest and fastest growing group in the nation.

The attrition rate Hispanics experience in high school has its roots much earlier; from the time they enter the educational system, Hispanic children score significantly lower than their majority age-mates in reading and writing (Applebee, Langer, and Mullis, 1985, 1986, 1987). However, there has been limited research on Hispanic students explaining why this occurs or how instructional change can make a difference.

This project focused on the reading strategies of Mexican-American students who are attending school in the United States, and who live in a barrio -- children for whom Spanish is spoken in the home and English is learned as a second language. It is based on the notion that language provides the medium through which adults socialize children to ways of thinking; from early on, children learn procedural as well as declarative knowledge when interacting in social settings in which language and literacy are used (Bruner, 1983, 1986; Nelson, 1985; Vygotsky, 1978; Wertsch 1985a,b). From this perspective, second language learning is not an entirely new experience. Instead, the learner draws upon established ways of knowing and doing in the process of learning to understand and to be understood in the second language.

Building an Envisionment: Reading and Writing as Constructive Processes

Reading and writing are constructive processes where meaning changes and builds as the text progresses, reflecting an interaction between what the reader or writer brings to the literacy experience and the inherent complexities of the text itself. To study this constructive process in first language learning, Langer (1985, 1987a) looked at ways in which the content and its presentation (reflecting declarative and procedural knowledge) relate to the text-world or <u>envisionment</u> a reader or writer develops at any point in time during a comprehension or composing experience.

An envisionment is the primary dynamic through which the reader or writer experiences the message. More than mere imagery, the envisionment connotes the total understanding a person has developed at any point in time during the creation of a particular text. The envisionment established after reading or writing any given portion of text is shaped by how earlier segments were interpreted and continues to develop and change as later segments are read. The envisionment includes not only the reader's or writer's interpretations or understandings of what has been read or written, but also what the reader or writer expects the text to include. And these interpretations and expectations are affected by who the reader or writer is -- by the meaning-making strategies and procedures that are used, as well as by the particular content knowledge the person has available to use.

To study the process of envisionment-building, Langer (1986) developed a system of analysis that examines reading and writing over time, during the unfolding of meaning. This permits identification of the knowledge and skills a reader or writer calls upon during the creation or interpretation of a particular text. From on-line protocols, the system permits a look "through" what readers and writers say in order to find underlying patterns in their reasoning, content knowledge, linguistic choices, strategic approaches, and monitoring of what they do. The focus is on the relationship between the nature of the task and the skills and knowledge people use -- on how readers and writers make meaning.

For this study, this work on envisionment was brought together with a sociocognitive view of literacy (Bruner, 1983, 1986; Bruner, Olver, and Greenfield, 1966; Cole, 1981; Vygotsky,1962, 1978). This view regards literacy not simply as the act of reading and writing, but as a way of thinking about language and text; it incorporates the social practices and ways of thinking associated with reading and writing in a particular culture into a definition of literacy (Langer, 1987b). This view asserts that:

> 1) all learning is socially based -- Literacy learning results from understandings that grow in social settings where reading and writing and talk about language occur;
>
> 2) literacy learning is an interactive process -- In becoming literate, people assume control over and internalize new skills and understandings by understanding how those skills and ideas work toward some end; and
>
> 3) cognitive behaviors are influenced by context, and affect the meanings that learners produce. People learn to use literacy activities for particular purposes and they learn particular strategies for completing those activities based upon their perceptions of the functions of the activities. Metalinguistic and metacognitive strategies are learned through the interactive events that are at the heart of literacy.

Because knowledge and use of the content, functions, structures, and strategies of literacy events are culture - specific, it is necessary to tease apart and then bring together again issues of learning and schooling for the second language learner. At this point in time, second language instruction may benefit from increased understanding of the knowledge students bring to their English literacy experiences.

In this project, we wished to understand the ways in which Mexican-American students try to make sense of English texts when they are engaged in reading and writing activities. We not only wanted to see what the students don't know, but more importantly, to study the various kinds of knowledge they call upon -- when things go right as well as wrong. What hypotheses do they make? What reasoning strategies do they rely upon? What structures do they use to organize their recalls? How does their knowledge of English and Spanish fit into their attempts to understand and make meaning? And lastly, how do the better meaning-makers differ from the poorer ones in each of these behaviors? Such information, we believe, is critical for the development of more effective approaches to literacy instruction.

The Study

Setting

A public elementary school in a low SES, racially mixed Northern California community was selected for the study. Located at the ends of two streets, the school was bordered on the south by federally subsidized low-income housing and on the north by railroad tracks. The campus consisted of several one-story self-contained units (each housing four or five classrooms) and some temporary trailers on the east side of the grounds.

The student body, reflecting the ethnicity of the surrounding community, consisted primarily of Mexican-Americans, Vietnamese, and Cambodians, many of whom had limited English

proficiency. (Approximately eighty percent of the students in the school were bilingual.) The school's commitment to the community and to multicultural education was evident in the educational programs that had been developed to serve the school's population, including Spanish bilingual education classes for parents as well as students, assertiveness training, child care facilities, and week-end Vietnamese and Cambodian language programs for community members. The school played an active and integral role in the life of the community.

Research Team

In addition to the principal investigator, the research team was composed of three researchers who were doctoral students in the Language, Literacy, and Culture program at Stanford University. One was a monolingual English speaker who had extensive experience as an ESL teacher and who was pursuing a specialty in the literacy learning of students for whom English is a second language. The other two research assistants were both Mexican-born Americans who were fluent Spanish speakers, and whose earlier life situations were similar to those of the students we were studying.

The two bilingual researchers interacted with the students, while the third researcher gathered school data, functioned as an observer, analyzed data, and provided an additional interpretive perspective. From the beginning, the children knew the research assistants were fluent in both languages. The researchers spoke Spanish as well as English to the teacher and bilingual

coordinator from the first time they entered the school. This was done to establish the understanding that the children could speak in either language, at any time, in interacting with the research team.

All interviews, reading questions, and probing questions were prepared in both English and Spanish. We were interested in what the students understood and how they understood, in both English and Spanish -- and they could use either language to communicate it (see Diaz, Moll, and Mehan, in progress) for a discussion of this issue.)

Students

Participating students were selected on the following bases: they were considered bilingual by the school, had been in U.S. schools for at least three years, and were of Mexican heritage. In-depth case studies were conducted with the twelve fifth grade students who met these criteria. The five males and seven females who participated were all of Mexican ancestry, with at least a minimal amount of literacy in both Spanish and English. School records, on file in the school office, were examined to obtain information concerning family and educational history as well as scores on standardized achievement tests in English reading and language and in Spanish reading.

Materials

The texts for the students to read and the data gathering materials (interviews and questions) were all selected or

developed with two criteria in mind: 1) to provide comparable tasks in both English and Spanish (offering students opportunities to read and speak in both languages); and 2) to tap the growing and changing envisionments the students developed over time, as well as what they recalled after having read each piece.

Student Interviews. Interview schedules were prepared to obtain information about the students' personal and school histories (e.g., place of birth, years in the U.S. and in Mexico, years in Mexican and American schools, literacy experiences at home, and perceptions of literacy in their lives). The interview schedule is presented in Appendix 1. This information combined with data obtained from school records provided a basis for interpreting student performance on the reading and writing tasks they were asked to engage in.

Reading Passages. Four reading passages (two in English and two in Spanish) were chosen in two genres, story and report, both of which comprise much of the reading children are asked to do in school (see Langer, 1986, for similar passage selections for monolingual English speaking children in grades 3, 6, and 9). They were selected from textbooks used in either United States or Mexican schools.

Both stories were about "firsts" (e.g., the first time someone had done something, or the first time something happened) and both reports were about animals. The English story and report were used from an earlier study (Langer, 1986) because

they were appropriate in difficulty and content, and because using them would allow for eventual comparison between these students and those in the earler study. The story, "Jackie," is about a child who moves into a new neighborhood and succeeds in winning the friendship of the boys there. At the end of the summer, the boys are surprised to find that Jackie comes to school the first day, wearing a skirt. The report, "The Mole," describes the characteristics and behaviors of moles.

The Spanish story and report, taken from basal texts used in Mexico, were comparable to the English texts in both content and levels of difficulty. In the Spanish story, "Raul y Duque," a mischievious boy named Raul is given a dog (Duque) for his birthday. They become fast friends, and one day when Raul gets stuck after climbing onto a roof, Duque saves him by alerting his mother. The report, "Las Abejas" (The Bees), describes the characteristics and behaviors of bees. All four texts are reproduced in Appendix 2.

Envisionment Questions

For each text, on-line questions (see Appendix 3) were developed to tap developing envisionments, to provide as much access as possible to the unfolding of meaning as they read. Although these on-line procedures are similar to those used with English monolinguals in earlier studies (Langer, 1986, 1987a), one full year of piloting was needed before arriving at the most effective way of tapping the on-line meaning development of bilingual students. We tried think-alouds, collaborative

summarizing activities, collaborative "choose your own adventure" activities, and interspersed comprehension questions which were textually implicit and textually explicit. Each of these activities elicited restricted language responses, conveying less than the students seemed to understand. These pilot activities seemed to call for either metacognitive and metalinguistic awareness or the use of decontextualized school-type language, activities in which the students had little practice (cf. Snow, in preparation).

We finally developed a set of questions that were open-ended and that encouraged the students to tell what they were thinking. Each text was divided into topical or episodic sections that stopped at a paragraph boundary (four for the stories and three for the reports). After each section, the students were asked to stop reading and tell: 1) what they knew at that point in time; 2) what they thought would happen next; 3) what they thought the next few words would be; 4) how they thought it might end; and 5) a question about the meaning of a key phrase in that text segment. An additional question about a fixup strategy was asked if they had experienced any difficulty in that reading segment. These questions provided a way to examine the students' knowledge of the content, genre, and text (syntax and semantics) of each passage without asking directly about each. This procedure also permitted analyses of the students' ability to hypothesize about text meanings.

Probing Questions

Probing questions, adapted from Langer (1986), were designed to gather information about the students' knowledge and strategies beyond what was learned from the envisionment questions. These questions were developed to probe students' knowledge in four categories: genre, organization, language, and content. (See Appendix 4.) Some of the probing questions focused on the students' understanding of genres and reading strategies in general, while others related to the particular tasks they had just engaged in. Unlike the on-line envisionment questions, the probing questions were "school-like" in that they required the students to objectify and discuss the texts, past experiences, and their knowledge of language. While the envisionment questions provided access to the students' growing understandings and strategies, the probing questions provided insight into the students' ability to talk about their understandings and strategies. In effect, the envisionment questions capture the students "doing" and the probing questions capture their "talking about."

Procedures

All twelve students engaged in the same tasks. Each of them met with a bilingual member of the research team for approximately six hours. During the first session, each student was asked the interview questions. During this and later meetings, the researchers made it clear to the students that they were bilingual and that the students should feel free to use the language they were most comfortable using, at any point in time.

The researchers thus got some indication of the students' language preferences in each situation, and a sense of their fluency in each langauge. Throughout the data gathering, the researchers mirrored the language lead of the students: when a student spoke in Spanish, he or she was responded to in Spanish, and the same for English.

The four passages, and therefore the different genres and languages, were presented in random order. The researcher always began each task using the language of the text, but if the student switched to the other language, the researcher would mirror that use -- and switch again when the student did.

After answering the probing questions, each student was asked, "Now, tell me everything you remember about what you read." These retellings provided further evidence of the kinds of content, organization, and structural features that appeared in the recalls, and provided additional information about the ways in which they structured recall across the various passage types.

After the oral retellings, the students were asked to write everything they could remember. They were instructed as follows: "Now, let's see you write everything you remember about what you read so the children in your class who won't be able to read this piece will know what it is about." In addition to serving as a further source of information regarding the students' comprehension across the varying genres and languages, this writing also provided further opportunity to observe the

knowledge sources they drew upon in their writing.

The sequence of data gathering procedures was the following:

a. Introduction and interview session
b. Passage reading sessions (4 sessions)
    1. reading and interspersed envisionment questions
    2. probing questions
    3. oral recall
    4. written recall

Each session was tape recorded and transcribed, and field notes were taken. The data available for analysis were:

1) 12 student interview responses,
2) 48 student oral readings of the four texts,
3) 48 responses to the envisionment questions for each text,
4) 48 responses to probing questions for each text,
5) 48 oral retellings, and
6) 48 recalls.

In all, approximately 70 hours of taped data were available for analysis, as were 48 recalls written by the students. These were augmented by the fieldnotes keyed to each individual session.

Analyses

Ratings

In addition to systematic reduction of the raw data in search for patterns, ratings were developed (on a 1 [low] to 5 [high] scale) for a number of data sets. These ratings were used as part of the case study presentations, and were therefore open to discussion and revision based on the research team's developing understanding of each particular case. Ratings were devised for:

1. the envisionment questions

Responses to each question were rated on a 1 to 5 scale based on the student's display of defensible (rather than

correct) understanding at the particular point in the text that the question was asked. Eventually these were collapsed into average scores for each question type for each passage, into average ratings across the hypothesis questions, and into a total envisionment score (an average across all responses to all envisionment questions).

The ratings provided a basis for comparison of general as well as particular kinds of envisionment-making ability for each student, for Spanish report, Spanish story, English report, and English story. They also permitted comparison of the students' ability to answer open-ended contextualized questions and decontextualized "school-type" questions asked in the probing questions (see below).

2. the probing questions

Whenever the particular question permitted, each response was rated on a 1 to 5 scale. Judgments were based upon the student's display of ability to understand and answer each particular question, rather than on expected responses. A composite rating for "talking about" was also given for each of the subsections: genre, language use, and topic knowledge. This also led to a later analysis of the relative difficulty students had in understanding and answering the different kinds of questions.

3. oral and written recall

In addition to fine-grained analyses of recalls (see below, under text analyses), each student's retelling and recall was rated on a 1 to 5 scale based on evidence of the student's understanding of the text.

4. meaning making abilities

Overall ratings, on a 1 to 5 scale, for meaning making abilities, cutting across data sets, were developed for four categories: overall comprehension, ability to hypothesize, understanding of text language, and familiarity with genre characteristics.

5. language proficiency and literacy environment

The language proficiency rating (on a 1 to 5 scale) was based on the researchers' interactions with each student, the judgment of the bilingual resource teacher, and school records when available. The literacy environment rating was based on a compilation of data about home uses and support for literacy from the student intake interviews, as well as pertinent information from school records and from the bilingual resource teacher comments.

Analyses of Recalls

The students' oral retellings and written recalls were analyzed in two ways. First, the percentage of concepts recalled by each student was calculated. Second, each retelling and written recall was analyzed to compare the superordinate rhetorical and lower level structures in each recall with those

in the original text.

To do this, each piece the students read was decomposed into a hierarchical tree diagram (see Langer's adaptation of Meyer's (1975, 1981) procedure in Langer, 1986; Langer and Applebee, 1987). These diagrams appear in Appendix 5. This permitted comparison of the content and structure of the recalls with the original texts, the content the students remembered across passage types, and the relationship of the content they remembered across language types. For this analysis, each passage was divided into sequentially numbered content units which were analyzed in terms of their rhetorical relationships to other information in the passage. For example, content units appearing at level 2 of the content hierarchy are very central to the major theme or central idea of the passage, while those at levels 4 and 5 are explanations and elaborations of the higher level ideas.

The students' recalls and rewrites were also divided into content units. The tree diagrams were used to examine the students' content units item by item. A particular content unit was counted as included in the recall or rewrite if any of the central ideas from the original content unit appeared at any point in the student's recall or rewrite, and the appropriate node on a tree diagram coding sheet was circled to designate recall of that unit. This permitted us to determine not only the number of ideas recalled or written about, but also the importance of those units in relation to the entire piece.

Analysis of Probing Questions

The probing questions were used in two ways: to examine what the students said they knew in response to our questions about genre, organization, content, and language; and also as a way to examine their ability to answer various types of decontextualized questions. During the pilot study, it seemed as if certain of the questions posed more difficulty for the students to answer than others. For example, one researcher asked reflectively in her fieldnotes, "I felt that X actually knew the answer to this question, but I couldn't find the right question to get at it." We wanted to learn which questions were more difficult for the students to answer, and what it was that distinguished these from apparently easier questions. During the pilot, we began to question whether we were actually tapping the students' ability to talk about their knowledge, or whether there were certain questions they did not understand -- in English, in Spanish, or in both languages.

To tap the content of the students' responses, their comments were analyzed first by immersion in all the transcripts, question by question, in order to discover underlying patterns; then the emerging patterns were rechecked on each individual transcript for all questions in a particular category.

The probing questions themselves were analysed in two ways: 1) the appropriateness of each student's response to the each particular question, and 2) the kind of knowledge each question tapped. It was expected that this approach would indicate whether there were certain types of questions the students

understood more or less well, the differences between the high and low envisionment makers in answering these questions, and the differences in responses based on language.

Answers to the questions that were open-ended (1, 2, 6, 7, 8, 10, 12, 16, 20, 21, 23, 30, and 36) were included in this analysis and rated on the following basis:

1) the answer was irrelevant to the question,
2) the answer was minimal, and somewhat unresponsive to the question,
3) the answer was appropriate, but incomplete
4) the answer was appropriate and complete
5) the answer was appropriate and elaborated.

We also looked at what the questions asked. First, they asked the students to exhibit four different kinds of knowledge:

1) knowledge of their own experiences with the text being read (K1),
2) knowledge of other, similar texts (K2),
3) knowledge of the text being read in comparison to other types of texts in general (K3), and
4) knowledge about texts or reading experiences in general, without reference to a particular text (K4).

The questions also required the students to focus on this knowledge from four different vantage points:

1) their own experience, something they had done (E),
2) their knowledge about knowledge -- meta level questions (M),
3) their knowledge of textual discourse, usually organizational features (T), and
4) their knowledge of language -- particularly English versus Spanish (L).

Two research team members separately rated the questions according to type of knowledge and focus of knowledge, and later compared their ratings, with 99 percent agreement. The 13 questions avaliable for analysis fell into the following categories:

Knowledge of own experience with text just read, about textual discourse (1 question);
knowledge of writing in general, at a meta level (3);
knowledge of text being read in comparison to other texts (1);
knowledge of their own experiences, at a meta level (3);
knowledge of own experiences with similar texts, at a meta level (2);
knowledge of textual discourse features, about texts in general (1);
knowledge of specific discourse features, of the text just read (1); and
knowledge of textual discourse features about similar texts, at a meta level (1).

The language questions (classified with 99 percent interrater agreement) dealt with knowledge of the students' own general language experiences (3), and knowledge of their reading experiences with respect to language -- English or Spanish (1). These questions were analyzed separately.

Standardized Test Scores and Envisionment Ability

Finally, we compared the students' standardized test scores on the California Test of Basic Skills with their envisionment ratings.

Case Study Sessions

Weekly project meetings were held at which time individual student cases were presented and discussed in detail, using transcripts, fieldnotes, and student writing as data, in an attempt to identify patterns in approaches to the construction of meaning and differential use of language and genre, both in regard to the student being studied and in comparison to those already studied. Minutes were kept on the growing insights, and individual summary sheets were prepared for each student.

In addition to the raw data, the analyses described above permitted a focus on particular issues within each protocol. The case study discussions reviewed both raw and coded data, and were used to further reduce the data into key patterns, which became the major findings of this study.

Findings

The various analyses permitted us to understand the students' approaches to meaning making in light of their individual as well as collective histories. The key questions we addressed were: 1) What were the students' school and home literacy experiences? 2) What reasoning strategies did they use when they read Spanish and English texts, and how did this affect their comprehension? 3) What was the content and structure of their recalls? 4) How did their knowledge and use of language affect their attempts to understand stories and reports, and to talk about what they know? 5) How did different question types affect the students' responses? 6) And, finally, what was the relationship between envisionment making and test taking for the students we studied?

The various analyses permitted us to study these issues student by student, from several vantage points: their personal backgrounds, how they read and answered the more contextualized envisionment questions, what they recalled from the passages they read, and how they answered the more decontextualized probing questions. Results will be presented from these vantage points.

Background Experiences

As displayed in Table 1, the students' backgrounds were varied. While all had spent at least 3 years in American schools, they had been living in the United States from 4 through 12 years. Although six had been born in Mexico, only three had attended earlier school grades in Mexico. Seven of the 12 students were judged to be proficient in both English and Spanish, while two children (Luis and Lupe) were judged to be weak in both languages. Blanca was English proficient, but had limited fluency in Spanish, and Teresa and Maria were judged to be Spanish proficient, but exhibited limited fluency in English. Their home literacy experiences varied, with Javier, Luis, and Teresa being exposed to little reading material or writing experiences of any sort, in either language, at home while Blanca was exposed to the richest literacy experiences. Their standardized test scores varied, with Teresa, Luis and Maria scoring in the lowest national percentiles on CTBS tests of English reading and language, and Blanca and Agustin scoring average or above. Almost all the students did better on the language than on the reading subtests, with Rosa, Sandra, and Carmen experiencing a 30 to 40 percentile point difference. Carmen scored in the 70th percentile in Spanish reading, but only in the 20th percentile in English reading; her English language score was closer to that of her Spanish reading. Maria, who was proficient in Spanish but weak in English speaking skills, scored low on all three tests although she attended U.S. schools all her life and came from a home with good support for literacy. On the

other hand, Terersa was fluent in Spanish and quite weak in English, but had spent her first four school years in Mexican schools; although her home offered few literacy experiences, she scored substantially higher in Spanish than English reading -- better than Maria. Experiences, language fluency, and achievement-- we saw few flat profiles, but rather a series of peaks and valleys -- offering sometimes discordant images of the students we had come to know.

Table 1 has been arranged by groups, based upon the students' ranked overall performance in meaning construction. Blanca, Javier, and Agustin were judged to be the best envisionment makers. Although Blanca comes from a Mexican origin family (her parents moved to California after they were married), the language of her home is English. She speaks and reads Spanish with her grandmother, and to other relatives, but is more comfortable speaking English. In contrast, Agustin and Javier were both born in Mexico, and attended kindergarten and first grade there. Spanish is the language of their homes, and they speak English to their friends and brothers and sisters. Both are fluent in English as well as Spanish, and switch from one to the other with ease. The only difference in background is that Agustin comes from a more literate household than Javier. While both boys displayed strong comprehending abilities in response to our reading tasks, this similarity is not reflected in their standardized reading scores, which are a quartile apart.

Insert Table 1 about here

Luis, Lupe, and Maria were judged to be the poorest envisionment makers; they called upon few productive strategies to help them understand the text in either Spanish or English. All three were born in the United States, and come from homes where Spanish is always spoken. Both Luis and Lupe were judged to be weak speakers of both Spanish and English, and Maria was judged to be fluent in Spanish, but weak in English. Their home support for literacy (in Spanish) varies, with Maria experiencing a good literacy environment and Teresa a relatively poor one. The test scores that were available are all low. But, how is Teresa different from them, and why is she a much better envisionment maker? And why did Carmen and Sandra, who perform comparably or better on standardized tests than Javier, and who come from more literacy-rich homes than Javier, perform more poorly as envisionment makers on the tasks we had set for them? The layers of analyses we performed helped tease apart some answers.

Reasoning and Comprehension Strategies

To answer some of these questions, we examined the students' meaning-making abilities -- the knowledge and strategies they displayed when reading and discussing what they had read. We hoped not only to find patterns in behavior that were similar across all students, but also to identify those that were different between the better and poorer readers. Such data, we thought, would be most useful in teasing apart some factors that inhibit many but not all linguistic minority students from more

ready access to literacy in English. Findings cut across a number of data sets (the on-line envisionment questions, the probing questions, and the students' recalls), and are presented by four categories each of which affects the ability to build meaning: overall envisionment building, ability to hypothesize, understanding of text language, and familiarity with genre characteristics.

Overall findings (see Table 2) indicate that although student performance varied across each of the four meaning making categories, all of the students exhibited some ability to make sense of what they read, to use hypothesizing strategies, to understand the language of the text, and to demonstrate their familiarity with the characteristics of the genres they read. It is particularly interesting to see that this ability remains fairly constant across rating categories, particularly among the highest and lowest performing students. Agustin was consistently highest in each meaning making category, although Blanca received higher standardized test scores. Luis was consistently lowest in each meaning making category, although Maria received lower standardized test scores.

Insert Table 2 about here

Envisionment making ability also varied based on text types (see Table 3), with all students experiencing more difficulty with the reports than the stories ($p < .008$). Most of the students tended to attribute story-like events to reports, particularly after they had read only the first section and we

asked them how they thought the piece might end. For example, when questioned about The Mole, Blanca said, "Maybe it has babies and the mother dies and then the babies will be on their own, and have to find food on their own" and Maria said, "Happy or sad, something happens to the mole." Such comments suggest a lack of familiarity with the conventions of the report genre.

Insert Table 3 about here

While both stories were easier for the students to understand than were the reports, all students performed somewhat better on the Spanish than the English story. It is possible that the characters and interactions were more familiar to them. Although Blanca, Javier, and Agustin, the top three envisionment makers, showed fewer discrepancies in meaning making ability within each genre, the language of the text was less of a constraint than genre to them. Luis, Lupe, and Maria, the three lowest envisionment scorers (and all weak English speakers), provided much more erratic responses; however for them as well, genre was a greater factor than the language of the text.

If we look at the students' ability to hypothesize however (see Table 4), language becomes a more important factor, with students predicting what would happen next, what the next few words would be, and how the text might end with considerably greater proficiency in response to the Spanish than English texts ($p < .006$). Even Blanca, who is fluent in English and weak in Spanish, provided better hypotheses for the Spanish than the

English pieces most of the time. This, too, may be due to their greater familiarity with the characterizations.

Insert Table 4 about here

The students' hypotheses also reflect their relative familiarity with the genres, and the students hypothesized more appropriately about stories than reports ($p < .021$). The specific kind of hypothesis questions they were asked across the entire text (What do you think will happen next? What do you think the next few words will be? How do you think it will end?) also influenced the students' abilities to respond ($p < .01$), with "How do you think it will end?" being the most difficult question for them to answer.

In all, the findings from these analyses tell us that although all students exhibited some use of all the meaning making abilities we measured, they differed considerably in the knowledge and skills they used to orchestrate the development of text understanding. The students who were the poorest envisionment makers were also the poorest hypothesizers. They also were least able to demonstrate understanding of text language (in either Spanish or English), and were least familiar with the characteristics of each genre, particularly of reports.

The Content and Structure of Student Recalls

In addition to examining how and how well the students made sense when they read, we also examined what they remembered -- across text language and genre. We hoped to learn whether

particular kinds of texts (the Spanish story that they processed with greater ease, for example) were more memorable to the students than others, not only in terms of the content and amount they remembered, but also in the centrality of the ideas, the depth, and the breadth of the information they remembered. We also wished to learn whether the mode of recall (writing or speaking) would make a difference in what was conveyed. The students' written and oral recalls were used to examine these issues.

Text Information Recalled. Findings indicate that the students included about the same percent of the content they had read in their retellings and in their writings; the number of concepts they talked about and wrote about were relatively comparable (see Table 5). But language played a part in the the number of key concepts they retold and wrote about ($p < .020$), with students more likely to better in response to the Spanish than to the English texts. While the high envisionment makers showed a distinct pattern of genre differences (with English story being the easiest), the poorer envisionment makers' recall of content was more comparably low across genres, languages, and mode of recall (speaking or writing). Although the poorer envisionment makers were better on-line meaning makers when reading the two stories and better hypothesizers on stories than reports, they seem to have experienced more generalized difficulty remembering and communicating what they had read. Their poorer hypothesizing and meaning making behaviors when reading all texts (see Tables 3 and 4) likely contributed to

their lower recall.

Insert Table 5 about here

Length of Recalls. In addition to the content the students remembered, it is also interesting to examine how much they remembered. To determine this, we divided the total number of words per passage (Jackie: 425; Mole: 368; Raul y Duque: 550; Abejas: 239) by the total words included in each recall. Findings indicate that the percent of content they remembered was about the same for both retelling and rewriting (about 25% on average), and the number of words the students used to convey their recalling of the pieces was also similar, with an average length for rewriting of 90 words and an average length for retelling of 105 words. However, all students used a higher proportion of words to talk and write about their stories than their reports ($p < .006$). Again genre as opposed to language made the greatest difference, with the students using almost twice as high a proportion of words to talk and write about the stories they had read than about the reports. (See Table 6.)

Insert Table 6 about here

Although the better envisionment makers tended to produce longer recalls on average, the relative length of each piece varied widely within as well as across students. For example, Maria who was one of the poor envisionments makers wrote a substantially longer piece about the Spanish story than either

Agustin or Blanca. And Luis' rewrite and retelling of the Spanish report were longer than Agustin's retell and Blanca's rewrite. Clearly, the poorer envisionment makers could produce oral and written language about what they had read, and sometimes did so in comparatively lengthy discourse.

Central Information Recalled. In addition to the amount of content included in the recalls and their relative length, the extent to which the students recalled information that was central to each passage was also analyzed. Since the tree diagrams portray the content of each text in a hierarchical fashion, content included in the top two or three levels of the structure represents the key concepts included within that passage, wherever these concepts may have been presented within the printed text.

All twelve students' recalls captured the central concepts (level 1) of the stories (the overriding narrative sequence) and of the reports (the rhetorical predicate representing the central thesis). Table 7 presents the percent of content units at the second and third levels of the content hierarchies the students captured in their oral and written recalls. In general, the students responded effectively to the organizational structure of the texts, recalling more of the central information at level II than the slightly less central information at level III ($p<.001$). The pattern of central ideas they recalled follows their pattern of genre familiarity ($p <.011$), with a greater percent recalled of the central story ideas (English 34%, Spanish 40%) as compared with the reports (English 21%, Spanish 29%).

Further, there is a much greater discrepancy between the content recalled at the second and third levels in the students' English as opposed to Spanish pieces, with relatively far less information being included at the third level in the English than in the Spanish pieces (level x language interaction, $p < .001$). This suggests that the key information recalled from Spanish texts was more highly described or elaborated, while the information recalled from English texts was more terse and unelaborated. It is important to remember, however, that the Spanish text recalls were almost always written or told in Spanish, and it is possible that the language of the recall affected the students' elaborations as much as (if not more than) the language of the text.

Insert Table 7 about here

Depth and Breadth of Information Recalled. In general, all students tended to follow the temporal order of the original stories and reports, and to produce very similar retellings and rewritings. However, another parameter which distinguished the better from poorer envisionment makers was the depth of the information they recalled. Since the analyses of the original reading passages provided hierarchical tree structures, succeeding lower levels represented explanations and elaborations of more important concepts. The English report and Spanish story each had seven levels of predicates, the English story had six, and the Spanish report had four. By comparing the students' rewritings to the original diagrams, we determined the depth of

information presented, that is, the degree of detail and elaboration. The three better envisionment makers tended to include information at greater depths than the poorer ones (see Table 8). For all eight tasks (rewriting and retelling of four passages), Javier included information at the lowest level recalled by any student. Blanca did so in seven of the eight tasks, the Spanish report retelling being the only exception. Agustin, who did not elaborate his comments as much as the other two, presented the most deeply elaborated recalls possible in response to only three of the eight tasks. In contrast, Maria, Luis, and Lupe were more erratic, recalling information sometimes with more and sometimes less detail.

Insert Table 8 about here

Just as the tree diagrams provided a measure a depth of content in the reading passages and student recalls, they also allowed us to consider the breadth of information recalled; that is, the extent to which the students included information from each of the information clusters throughout the passage as opposed to capturing only one aspect of the content. Once again, the three better envisionment makers' recalls contained information from more of the passage; their recalls included content from the beginnings, middles, and ends of the stories and from the major information clusters in the reports. In contrast, the three poorer envisionment makers' recalls were more disparate, sometimes including only the middles of the stories (as Lupe in her Spanish story recalls) or only parts of the

beginnings and ends (as Maria in her recalls of the Spanish report).

Through a look at the rewritings and retellings we have seen that those students who performed better in envisionment making while reading also tended to perform better in their rewritings and retellings. Neither the mode of recall nor the language seemed to be as important as the genre in determining where the students experienced the greatest difficulty; they had greatest difficulty in building envisionments, hypothesizing, and utilizing the structure when they were reading reports, and they also recalled less important information with less depth and breadth afterward.

We have also learned that all the students spoke more about the stories, remembered more of the key concepts, and maintained more of the structural elements of the individual stories when they rewrote and retold them. As when they were reading the text, their recalls seemed to be affected more by the genre of the piece than the language in which the text was written. Further, the better envisionment makers recalled more central information from all four pieces they read with greater depth and breadth than the lower envisionment makers. However, all students displayed an ability to read and write that exceeds the expectations suggested by their CTBS scores. To pursue this issue, let us look at their uses of language when reading.

How Language Affects Comprehension

In this study, although all the students displayed an understanding of the expressions and ideas they read most of the time, the quality of their responses differed -- some students providing decontextualized responses, and most providing meaningful but more contextualized ones. Because the ability to understand various aspects of text language is a particularly important factor in the literacy development of bilingual individuals, we thought it important to pursue this issue. We wished to examine ways in which the students talked about text meanings, how well they understood English expressions found in each text, and what they reported thinking and doing when reading in both English and Spanish. To do this, we examined the students' responses to the vocabulary envisionment questions, their oral reading miscues, and their responses to our probing questions about language use.

Students' Responses to Vocabulary Questions. Snow (in preparation), in a recent study of oral language correlates of school literacy, suggests that the ability to provide formal definitions is a core marker of students' acquisition of decontextualized language skills, and that this ability correlates highly with standardized reading achievement test scores, while descriptive definitions tend to be conversational in nature and do not correlate as highly with standardized tests. She posits that descriptive definitions are more conversational and less like the decontextualized language needed for success in school tasks. This explanation may account at least in part for

the discrepancy we were finding between the students' performance as envisionment makers and as standardized test scorers: the envisionment questions invite contextualized responses while the tests involve decontextualized language. To explore this issue, we examined the students' responses to our during-reading questions about selected expressions in the text (the on-line envisionment question about text vocabulary), looking for patterns of language and thought.

In their responses, all of the students displayed good understandings of the expressions we asked about in the vocabulary envisionment questions (e.g., "What do you think it means to say, Here was their chance to check the kid out?"). A closer examination of their responses indicated that they used seven different language patterns to answer such questions:

1. use of paraphrases - the student reworded the meaning of the key word or phrase

2. use of synonyms - the student repeated the phrase and substituted for key words with other words with nearly the same meaning

3. use of definitions - the student attempted to state the meaning of key words or phrases in an abstract and decontextualized dictionary-like fashion.

4. use of examples - the student provided instances that illustrated the meanings of key words and phrases

5. use of interpretations - the student explained the phrase, providing his or her conception of its meaning

6. use of translations - the student switched to an alternative language (Spanish or English) and either offered a verbatim translation or pharaphrased, using the alternate language

7. repetition of key words or phrases - the student repeated the key words or entire phrase verbatim

(For coding purposes, "other" was used to indicate such unscorable comments as unrelated responses or no response at all.)

As Table 9 indicates, students provided many fewer comments in response to the vocabulary questions about both the Spanish and English reports as opposed to stories, with approximately 60% or more of the comments eliciting "I don't know." However, when they did respond, the top group provided more paraphrases, synonyms, definitions, and combined responses, while the lower group provided more translations, examples, and explanations. The reports produced a more restricted array of strategies than the stories, with no students offering definitions to questions on the meanings of report language. Most interesting is that the better envisionment makers attempted to provide more abstract and decontextualized responses - definitions - than did the poorer envisionment makers, who tended to provide more examples and explanations.

Insert Table 9 about here

However, when the abstract nature of the responses was not considered, most students displayed good understanding of the English text language. When asked about a variety of phrases contained in Jackie and The Mole, 78% of the responses displayed good understanding of the English expressions. For example, in response to the question, "What does it mean to say "something ripped," some said "Like when it's torn," while others gave

specific examples such as "Like I was pulling my button and it came off," or "Like if there was a needle in the chair and you went like that (gestures), it would have just opened." Still others used ripped to describe itself, such as "the towel ripped," or "the pants ripped," or "he ripped his pants".

We also performed a miscue-type analysis of the students oral readings of the Jackie and The Mole passages. While we expected that the students would display more wrong labels (pronouncing the words incorrectly, adding, or omitting words that do not change the overall meaning) than wrong meanings (where the word used is different from the text meaning), the frequency of both types of miscues was even lower than anticipated for both story and report. When reading Jackie, the students mislabeled 2.9% of the total words, with wrong meanings used for only .7% of the total words. They mislabeled 5.4% of the words in The Mole, with wrong meanings ocurring in only 1.7% of the words read. In each case, the students strayed from acceptable text meanings less than 2% of the time.

The ability of the students to understand English phrases and expressions in context, and their ability to maintain the semantic meaning of the text, attests to the linguistic and strategic competence of most of the students we studied.

Using Spanish and English. However, we were also interested in whether the students flexibly used their knowledge of both languages in order to construct and negotiate meanings as they read. To examine this, we analyzed the students' responses to

probing questions about the language they had used when they read each of the selections (at the level of words, ideas, refinement of meanings, and general thoughts about the piece). In particular, we were interested in the extent to which they used their knowledge of one language to help them make sense of the other, particularly when the text was difficult or when they were stuck.

The students reported that they said the words to themselves in the language of the texts they were reading -- more so in the language of the report (English: 75%, Spanish: 83%) than in the language of the story (English: 58%, Spanish: 58%). Similarly, they said they generally thought of ideas in the language of the text except for the English story where they reported they used both languages a quarter of the time. And they said that when reading was difficult, they tended to use both languages more often for English texts (Story: English: 50%, Both: 33%) and Report: English 50%, Both: 34%), than for Spanish texts (Story: Spanish: 83%, Both: 17% and Report: Spanish: 75%, Both: 16%). For example, when reading Raul y Duque, 83% of the students reported they they used only Spanish, while only 50% reported using only English when reading Jackie. When asked about the reports, 75% said they used only Spanish while 50% reported using only English. Further, when asked which language they had used to think about the story after reading, 75% of the students reported they thought in the language of the text with the exception of the English story where 25% responded that they thought in Spanish, and 41% said they used both languages.

These results support our findings from the other analyses that the students relied heavily on their knowledge of Spanish to support them in understanding the English text for themselves, and in conveying that knowledge to others. Further, this analysis indicates that they used their knowledge of Spanish more often during story than report reading. This may be due to the fact that students read more report-like texts in school where the language is English, than stories which they are more likely to have heard and read in both languages. It is also possible that because stories invite the reader to fill gaps (Iser, 1978) by calling on personal knowledge, the students feel it appropriate to use their knowledge of both languages and both cultures since the experiences they call upon are more "lifelike" (Bruner, 1986). Reports, on the other hand, are more likely to require the reader to gain meaning from the logic of the written presentation.

From the analyses of ways in which their knowledge of English and Spanish affected the students' comprehension, we learned that although the students adequately understood the text language, they responded to our on-line vocabulary questions with more conversational than decontextualized language. This supports our findings that they were less able to answer the probing questions (which were were decontextualized) than the on-line envisionment questions (which were more contextualized.) Further, all students responded with greater appropriateness and elaboration to the Spanish than the English texts. And they

reported that they relied more on Spanish to help them better understand the English texts than they did on English to help them understand the Spanish ones.

Students' Responses to Different Question Types

In addition to examining the meaning-making strategies the students used, what they understood, and what they recalled, we felt it particularly important to examine the students' responses to the questions we asked. We used the after-reading probing questions as the data set. Since the probing questions were more decontextualized than the envisionment questions, we were interested in learning whether there were differences in the students' abilities to answer the two types of questions, even when their understanding of the pieces was the same.

In general, we found that the students' responded to the probing questions with "school like" behaviors -- they searched for knowledge acquired or expected during classroom instruction rather than sharing what they knew or thought, a situation not seen in response to the envisionment questions. For example, when asked, "How do you think a piece like this usually begins?" many students said, "With a capital letter," while when asked, "What have you learned that is happening so far?", they focused on meaning.

As Table 10 indicates, the better envisionment makers responded more accurately to the envisionment questions (M=3.49) than the poorer envisionment makers (M=2.32), across all question types ($t=2.82$, $p<.024$). Further, all students, high and low

envisioment makers alike, responded more appropriately to the Spanish than the English probing questions (Spanish M=3.58, English M=2.57, t=2.88, p<.023). Although the students chose to almost solely speak English during the meetings in which they read the English texts and Spanish when reading the Spanish texts, they all had greater facility in responding to the various types of probing questions in Spanish. Since they were asked the Spanish questions in Spanish and the English questions in English, it is possible that they either better understood the questions that were asked to them in Spanish, that they had more facility responding to the questions in Spanish, or both.

Insert Table 10 about here

As for the question types, all student responded with greater appropriateness to the questions that required knowledge of their own experiences in relation to the text just read and least appropriately to textual discourse questions tapping knowledge of other texts. This finding supports the literature that decontextualized interactions are more difficult for Mexican-American students than contextualized interactions. Beyond this, however, it indicates that the issue of decontextualization is one of degree -- the students were able to answer more decontextualized questions when the situation was more contextualized (about their own immediate experiences), and less able to answer the even more decontextualized questions (about opaque discourse features of generalized texts).

Envisionment-Making and Test Taking

Since the envisionment questions were developed to tap the growing and changing text worlds the students developed, the responses to these questions are, by their very nature, more contextualized; they represent the students' attempts to convey their understandings to a person who also has read the text. Therefore, while they are meant to provide a window on students' text understandings, they do not require the students to select among language and meaning responses in language that is not their own; they do not have to "select" a right answer. Similarly, unlike traditional test questions, the envisionment questions do not require the student to hold information in memory (or to search for particular information) that is no longer part of the reader's text world after subsequent portions of the text have been processed (see Langer, 1985, 1987a).

Because the two types of questioning activities are so different, and some of the the students performed so differently in each, it is useful to compare the students' performance on the standardized CTBS tests with their responses to the envisionment questions for the English passages. (Although there is sometimes a correspondance, these calculations differ from the overall envisionment scores used to group the students into high, middle, and low envisionment makers since those were overall ratings across the reading, probing questions, retelling, and writing data sets, while these are based only on the students' responses to the first on-line reading question for each question segment: What have you learned that is happening so far? Tell me

everything you know from what you have just read; What is happening now? and Tell me everything you now know from what you've read.)

Insert Table 11 about here

A number of patterns emerged that differentiated better and poorer CTBS scorers:

1. Envisionment making and decontextualized language use. The top three students were all comparably good envisionment makers, but scored differently on the CTBS. Agustin and Blanca both were the highest scorers on both the CTBS (in the 50th and 60th percentiles) and envisionment measures (5.0 and 4.5). Blanca comes from an English speaking home and Agustin attended school in Mexico for two years. (Research suggesting that basic literacy skills attained in the first language, in the form of primary grade schooling, has a positive effect on literacy learning in the second language may explain in part Agustin's good comprehension in both languages.) Also, both Blanca and Agustin come from homes where literacy is used and encouraged. In contrast, Javier, the only top envisionment maker who comes from a home with weak support for literacy, scored only in the 20th percentile on the CTBS. Although his responses to the Spanish passages were consistently better than to the English, his ability to answer the decontextualized probing questions was weaker than that of the other two students. Although he was more successful than most of his classmates in using his good reading strategies to comprehend, and more like the high envisionment makers than the others in meaning making abilities, his CTBS cores do not capture these strengths.

For example, Javier's envisionment responses are qualitatively more similar to Blanca's (with a higher CTBS score) than Enrique's (with a similar CTBS score). In response to the

final Mole question, "Now tell me everything about what you just read" (the one all students found most difficult), Blanca said,

> The mole - he makes mounds in people's lawns and he eats worms and he doesn't weigh a lot. But he eats too much...That he has busy days hunting... that the moles live underground and they don't like the sunlight. They like to be in the dark. And they have little ears 'cause if they had big ears the ears would get in the way. And they have hairs that brush the dirt or something. And they have tine eyes... they burrow tunnels with their feet. And it has two tunnels, one for their home and the other for the food tunnel where they store the food there.

Blanca was able to relate what was happening as well as give specific examples and even infer from what she has read:

> They called him that because he was real mean to people.)

Javier's response to this same questions for the Mole passage was:

> That the mole lives underground and he hunts for food. That he digs in people's lawns. That a mole makes tunnels to hunt for food. That they have small ears "cause if they have'em long it gets in the way. That they don't like no light. That they try to stay away from the light. That they kick hard and go fast. And he goes digging 12 to 15 feet in an hour.

While Blanca's response includes more of the details (eats worms, two tunnels) Javier's response indicates comprehension that is less discrepant from hers than their CTBS scores indicate.

Enrique's response was:

> That they have a tunnel for food and another tunnel to hunt for food. In the lawn they are -- they said there are many worms they can hunt for. That's it.

In contrast to Javier's response, Enrique's is both brief and somewhat inaccurate. There is little indication that he has

gained as much information from the piece as the other two have done.

2. Meaning making and question-answering abilities. In contrast to the three top envisionment makers, the three lowest envisionment makers (2.5 or lower) all scored below the 29th percentile on the CTBS. While they are all weak in English proficiency, they did not score higher on their Spanish than on their English envisionment ratings. Each was born in the United States, and both Luis and Lupe have limited proficiency in Spanish as well as English. All seem weak in meaning making strategies, in both languages.

For example, Lupe's response to the question from the Mole passage was,

> Moles are soft? The mole kicks and pushes, pushes the tunnel and makes its way. Some time he spent wrestling and eating. It feels its way home. No, it feels its way with its nose.

Although she indicates an understanding that the piece is informative, maintained the text meaning in 99% of her reading of the piece, and has reported the bits of information she can remember, she conveys little understanding of the text. Her meaning-making abilities were consistently weak in both Spanish and English, and she was among those who had the greatest difficulty answering questions of all sorts, particularly the ones that were more decontextualized. While the CTBS and the envisionment questions do not measure the same abilities, each reflects her poor reading skills.

3. Fluency in English. In contrast, Teresa, who attended the first four years of schooling in Mexico, is fluent in Spanish and weak in English skills. However, she is a good meaning maker in Spanish and displayed strong meaning making strategies on the tasks we observed. Although English was difficult for her, she attempted to use her good Spanish reading skills to help her understand. Thus, although she scored lowest of all the students on the CTBS test, this is a function of her language fluency rather than reading ability.

4. Development of meaning making strategies. Sandra, who was born in the United States, is considered fluent in both languages and comes from a home that is supportive of literacy, also scored higher on the Spanish than on the English envisionment passages (she did very well on the English story, but found the English report quite difficult). However, she was one of the higher CTBS scorers, falling into the 30th percentile in reading and the 63th percentile in language. Sandra demonstrated erratic meaning making strategies, sometimes displaying inability to hypothesize. Her response to the envisionment question to the Mole passage was:

> About the Mole, it hunts for food. They don't want to see the light. They are soft. A mole digs to the top at 15 feet an hour. That they live nearby dirt soil and where there's plents of worms and beatles.

Similarly, Pablo, Rosa, and Enrique all displayed moderate ability to build successful envisionments in both Spanish and English. Each was able to hypothesize and build and change meaning as the texts progressed. However, their use of good

reading strategies in both languages was inconsistent, and varied from situation to situation.

In short, there were a number of reasons why the students performed well or less well on reading English texts. Sometimes they were good readers, with comparably good reading strategies in Spanish and in English, who scored higher than the others on both measures, such as Blanca and Agustin. At times they were good envisionment makers who did better answering more contextualized than decontextualized questions, particularly in English, and therefore scored poorly on the CTBS, such as Javier. Sometimes it was their unfamiliarity with the English language that held them back, as in Teresa's case. But more often it was the students' poor or inconsistent use of good reading strategies (such as Enrique and Sandra), the lack of ability to hypothesize about text meanings, to flexibly create and build meanings as the text progresses, to use context to understand text language, and to use their familiarity with genre conventions as they created meaning in either language. The CTBS test scores did not reflect these differences in reading ability.

However, as in Langer's studies of monolingual English speaker's meaning construction (1987a), here too there was a positive correlation between standardized reading scores and envisionment making ability ($p < .01$). Langer argues in her previous work that this occurs because the ability to take reading tests and the ability to build envisionments call upon some common linguistic knowledge; however, the tasks are

cognitively quite different, calling on yet different knowledege and different strategies. While standardized multiple choice tests tap reading-related abilities, they do not tap the act of reading itself -- something the envisionment rating comes closer to doing. The distinctions among students that became evident through the envisionment analyses permitted us to understand the relative strengths and weaknesses of the students we studied, distinctions standardized tests are unable to make.

Further, these distinctions among students, when considered with the findings related to the students' question answering abilities, suggest that "relative decontextualization" may account for the differences in envisionment ratings and standardized test scores for some of the students we studied. In the envisionment questions we asked, the students did not have to contemplate appropriate form or to match the language of their knowledge with what they thought the researcher expected. They knew we were ultimately after what they were understanding, thus they took ownership for their ideas and voiced what they knew. In comparison, the students felt that the probing questions were ours, and determination of acceptable responses seemed to rest with us, not them. Thus, they searched for a "right" answer, exhibiting less than they actually knew. In this way, standardized tests, where students must select from among language choices already provided may be one rung more abstract on the ladder of "relative decontextualization."

Summary

Across each of the analyses, four major findings emerged:

1. Beyond the necessity for a basic (but limited) knowledge of English, the students' abilities to use good reading strategies made a difference in how well they comprehended -- in both English and Spanish. Some students used good reading strategies in both Spanish and English, and their success in using these strategies affected their success in comprehending. For example, Javier and Agustin were good meaning makers in Spanish, their first language. The could build growing and changing envisionments based on the developing text, could hypothesize about what would happen next, what they thought the next few words might be, and how the piece might end -- and used this knowledge to make sense when they read in English as well as in Spanish. Blanca used good reader strategies in English, her dominant language, and used these to make good sense in Spanish. In addition, Teresa had a very limited vocabulary in English, but used excellent strategies in her reading of Spanish texts. She also used these strategies in approaching English text, and these helped her make sense of them.

However, some students used poor reading strategies in Spanish as well as in English, and despite their proficiency in the English language, their ability to make sense in English was limited. For example, Luis, Lupe, and Maria each were less able to develop changing envisionments or to make apppropriate hypotheses about subsequent material. Although they were most successful reading the Spanish story, they were more restricted

than the others in the range of meaning-making strategies they used in Spanish, their dominant language, and they used equally restricted strategies in their approaches to making sense of English texts.

Findings were fairly similar across text language; students who did well in one tended to do well in the other. For the students in this study then, the use of good reading strategies rather than degree of fluency in English differentiated the better from the poorer readers.

However, the students' knowledge of Spanish was a support to them both in developing understandings and in answering decontextualized questions. The students reported that they thought of words and ideas in Spanish when they read in English texts, and thought in Spanish when they were "stuck." When reading Spanish texts, they did not rely on English to the same extent. Further, all students answered decontextualized questions more successfully when they were asked in Spanish and they answered in Spanish.

2. Students' familiarity with genre also affected their ability to build appropriate text meanings -- reports were consistently more difficult for the students to comprehend and recall than were stories. All students performed best on the Spanish story, followed by the English story, the Spanish report, and then the English report.

Both reports were considerably more difficult for the students to read than the stories, and they displayed considerably less familiarity with the report genre in their hypotheses. However, the better envisionment makers knew that they didn't know, and attempted cautious guesses that were good beginnings. The poor envisionment makers more frequently attempted to impose a story structure on the report, hypothesizing that "something will happen to the mole -- he might get hurt."

3. The kinds of questions the students were asked affected their ability to communicate what they understood. Open-ended questions that tapped their own growing envisionments and the understandings they had developed provided greater insight into what and how well they understood than either display questions or questions that required a decontextualization of the referents or an objectification of the text. Thus, "In the kind of piece you just read, is the content usually in a certain order?" or "What order was used in the piece you just read?" or "Why do you think the author wrote this piece?" were more difficult for the students to answer than "What have you learned that is happening so far?"

Although the better envisionment makers did better than the poorer envisionment makers on the more decontextualized probing questions, even they had difficulty with these questions.

4. All of the students exhibited the ability to gain meaning from phrases in context and to explain what they meant. However, the

better envisionment makers provided more "school like" explanations and definition's (e.g., "Raul got into trouble by doing things he is not supposed to do" or "mischievious - that he doesn't behave or pay attention"), while the poorer envisionment makers tended to paraphrase the text ("That he always gets into mischief") or to give incomplete examples ("Like when you're a bad boy"). Although the levels of response differ, almost all indicate an understanding of the phrases as used in the text.

5. All of the students exhibited greater comprehension of the English texts they read than would be expected based on their standardized reading comprehension test scores. In addition, the higher envisionment makers did more poorly on standardized tests than might be expected. Many of the students also did poorly on certain of the more decontextualized probing questions. They were able to build meaning, but not answer test-type questions. Such tests seem to be an ineffective way to tap what bilinguals have understood from reading. Using open-ended questions such as those used in this study may serve as a useful instructional bridge between contextualized student language and decontextualized school language, and may also provide teachers with a better understanding of what their students understand and where strategic, content, or language help is needed.

From this study we have learned a good deal both about productive ways of tapping second language students' reading comprehension and about the strategies they use to arrive at

their understandings. The data gathering approaches developed for this study provide far more information about comprehension than those that are more traditionally used. We also learned that second language learners know a lot more about what they read than is generally acknowledged, although they do not communicate their knowledge in ways that are traditionally tapped in American classrooms, instructional materials, or tests.

However, this was an initial study, and much more research is needed, using the procedures we developed in further attempts to understand student performance in light of both first and second language proficiency, first language reading achievement, and school history including the kinds of second language instructional programs to which students are exposed. Instructional implications also need to be studied. For many of the children we studied, instruction in good meaning-making strategies may be more helpful than a predominant focus on English fluency, but the benefits of such instruction in either or both languages need to be investigated.

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TABLE 1: Student Background Information

	Place of birth	Years in U.S.	Years in U.S. Schools	Years in Mexico	Years in Mexican Schools	Proficient English	Proficient Spanish	Percentile CTBS Scores English Rdg	Percentile CTBS Scores English Lang	Percentile Scores Spanish Rdg	Home Literacy Rating
Blanca	U.S.	11	6	0	0	Y	N	60	60	NA	5
Javier	Mex	5	5	6	1 - 2	Y	Y	22	24	42	2
Agustin	Mex	4	4	7	2	Y	Y	52	50	50	4
Teresa	U.S.	6	3	4	4	N	Y	1	17	42	2
Rosa	Mex	12	6	0	0	Y	Y	20	63	45	4
Pablo	Mex	5	6	5	0	Y	Y	26	31	44	4
Sandra	U.S.	11	6	0	0	Y	Y	30	63	47	4
Enrique	Mex	9	6	2	0	Y	Y	20	25	NA	4
Carmen	Mex	10	6	1	0	Y	Y	20	58	70	4
Luis	U.S.	11	6	0	0	N	N	17	20	23	2
Lupe	U.S.	11	6	0	0	N	N	17	29	NA	3
Maria	U.S.	11	6	0	0	N	Y	13	15	17	4

TABLE 2: Ratings of Meaning Making Abilities

	Overall Envisionment Building	Ability to Hypothesize	Understanding of Text Language	Familiarity With Genre Characteristics
Blanca	4.25	4.75	4.00	4.00
Javier	4.25	4.25	4.25	4.25
Agustin	5.00	5.00	4.75	5.00
Teresa	3.50	3.25	2.75	4.00
Rosa	4.00	4.25	3.25	4.25
Pablo	3.75	3.0	4.50	3.50
Sandra	3.50	3.5	2.75	3.75
Enrique	3.25	4.0	4.25	4.25
Carmen	4.00	3.5	3.25	3.25
Luis	2.00	1.81	2.25	2.25
Lupe	2.25	2.75	2.25	2.75
Maria	2.50	2.75	3.00	2.75

	M	(SD)	M	(SD)	M	(SD)	M	(SD)
All	3.52	(0.89)	3.57	(0.92)	3.44	(0.88)	3.67	(0.79)
Top 3	4.50	(0.43)	4.66	(0.38)	4.33	(0.38)	4.42	(0.52)
Bottom 3	2.25	(0.25)	2.44	(0.54)	2.50	(0.43)	2.58	(0.29)

TABLE 3: Envisionment Ratings By Text Types

	Spanish Story	Spanish Report	English Story	English Report
Blanca	4.7	3.3	5.0	4.3
Javier	4.7	5.0	3.7	3.7
Agustin	5.0	4.7	5.0	5.0
Teresa	5.0	3.3	3.0	1.3
Rosa	4.0	3.7	3.3	4.3
Pablo	3.7	3.3	3.0	3.3
Sandra	4.7	4.0	3.3	1.3
Enrique	4.7	3.3	4.0	3.7
Carmen	4.0	2.0	4.3	3.0
Luis	1.7	2.0	2.0	1.3
Lupe	3.3	2.3	2.0	2.0
Maria	4.7	1.3	3.0	2.0

	M	(SD)	M	(SD)	M	(SD)	M	(SD)
All	4.2	(0.9)	3.2	(1.1)	3.5	(1.0)	2.9	(1.3)
Top 3	4.8	(0.2)	4.3	(0.9)	4.6	(0.8)	4.3	(0.7)
Bottom 3	3.2	(1.5)	1.9	(0.5)	2.3	(0.6)	1.8	(0.4)

Within Subjects ANOVA

Effect	df	F	Sig
Language	1;11	3.67	.082
Genre	1;11	10.41	.008
Language & Genre	1;11	2.44	.146

TABLE 4: Hypothesis Ratings Within Texts

	What comes next?				What will next word be?				How will it end?			
	Stories		Reports		Stories		Reports		Stories		Reports	
	Eng	Sp	Eng	Sp	Eng	Sp	Eng	Sp	Eng	Sp	Eng	Sp
Blanca	4.33	5.00	4.00	5.00	3.33	4.00	4.50	3.00	4.33	5.00	3.00	3.00
Javier	4.00	5.00	4.00	5.00	4.00	4.50	4.00	4.50	3.33	5.00	3.50	4.50
Agustin	5.00	5.00	3.50	4.00	3.33	4.30	4.00	4.50	4.00	4.60	4.50	3.00
Teresa	3.33	5.00	3.00	4.00	2.66	5.00	2.50	4.00	2.33	5.00	1.00	5.00
Rosa	4.00	5.00	5.00	5.00	3.66	4.00	3.50	4.00	4.00	5.00	2.00	3.50
Pablo	5.00	4.33	3.50	4.00	4.33	4.30	4.00	4.00	5.00	3.30	4.00	4.50
Sandra	2.66	5.00	2.50	5.00	3.66	4.30	2.00	2.50	2.66	4.70	1.00	1.50
Enrique	3.00	3.30	3.00	2.50	2.66	3.70	3.50	2.50	2.00	3.70	3.00	2.30
Carmen	4.00	3.70	1.50	1.50	4.00	3.30	4.00	3.50	3.30	5.00	1.50	1.50
Luis	1.66	2.30	2.00	3.00	3.00	1.30	2.50	3.00	1.30	1.00	1.00	4.00
Lupe	2.66	4.70	2.00	3.50	2.33	4.30	4.00	3.50	2.66	4.00	2.00	3.50
Maria	3.66	5.00	1.50	1.00	2.00	3.50	1.00	1.00	3.00	4.30	1.00	1.00
All												
M	3.61	4.86	2.96	3.62	3.25	3.89	3.29	3.33	3.16	4.22	2.29	3.11
(SD)	(1.00)	(0.90)	(1.10)	(1.40)	(0.70)	(0.90)	(1.00)	(1.00)	(1.00)	(1.20)	(1.30)	(1.30)
Top 3												
M	4.44	5.00	3.40	4.66	3.55	4.28	4.17	4.00	3.89	4.89	3.67	3.50
(SD)	(0.50)	(0.00)	(0.30)	(0.60)	(0.40)	(0.30)	(0.30)	(0.90)	(0.50)	(0.20)	(0.80)	(0.90)
Bottom 3												
M	2.66	4.00	1.83	2.50	2.44	3.05	2.50	2.50	2.33	3.00	1.67	2.83
(SD)	(1.00)	(1.50)	(0.30)	(1.30)	(0.50)	(1.50)	(1.50)	(1.30)	(0.90)	(1.80)	(0.60)	(1.60)

Within subjects ANOVA

Effect	df	F	Sig
Question	2;22	5.65	.010
Genre	1;11	7.31	.021
Language	1;11	11.32	.006
Interactions	7;77	2.1	.053

TABLE 5: Percent Content Units From Original Texts
In Student Recalls

		Story		Report	
		English	Spanish	English	Spanish
Blanca	Rewrite	39	34	29	35
	Retell	25	42	26	35
Javier	Rewrite	32	47	35	30
	Retell	32	45	35	35
Agustin	Rewrite	30	32	29	40
	Retell	20	39	32	50
Teresa	Rewrite	32	53	9	50
	Retell	NA	49	3	30
Rosa	Rewrite	14	42	15	25
	Retell	25	32	9	30
Pablo	Rewrite	14	26	12	25
	Retell	23	25	24	35
Sandra	Rewrite	9	38	12	40
	Retell	11	43	12	40
Enrique	Rewrite	45	30	18	20
	Retell	50	34	15	35
Carmen	Rewrite	27	40	15	20
	Retell	13	38	9	15
Luis	Rewrite	18	15	24	30
	Retell	18	11	15	30
Lupe	Rewrite	21	13	21	15
	Retell	5	13	24	15
Maria	Rewrite	27	30	15	10
	Retell	13	15	15	10

		Story				Report			
		English		Spanish		English		Spanish	
		M	(SD)	M	(SD)	M	(SD)	M	(SD)
All	Rewrite	25.7	(10.8)	33.3	(11.8)	19.5	(8.1)	28.3	(11.5)
	Retell	21.4	(12.2)	32.2	(13.1)	18.2	(9.9)	30.0	(11.5)
Top 3	Rewrite	33.7	(4.7)	37.7	(8.1)	31.0	(3.5)	35.0	(5.0)
	Retell	25.7	(6.0)	42.0	(8.5)	31.0	(4.6)	40.0	(8.7)
Bottom 3	Rewrite	22.0	(4.5)	19.3	(9.3)	20.0	(4.6)	18.3	(10.4)
	Retell	12.0	(6.5)	13.0	(2.0)	18.0	(5.2)	18.3	(10.4)

Within Subjects ANOVA

Effect	df	F	Sig
Mode	1;10	.11	.752
Genre	1;10	1.27	.285
Language	1;10	7.59	.020
Interactions	4;40	1.06	.390

TABLE 6: Words in Recalls as Percent of Original Texts

		Story		Report	
		English	Spanish	English	Spanish
Blanca	Rewrite	51	25	20	17
	Retell	37	50	24	27
Javier	Rewrite	41	36	29	27
	Retell	56	42	22	28
Agustin	Rewrite	40	22	23	23
	Retell	22	18	20	21
Teresa	Rewrite	31	40	6	34
	Retell	NA	29	4	31
Rosa	Rewrite	34	43	24	25
	Retell	45	44	9	33
Pablo	Rewrite	18	14	14	17
	Retell	34	22	30	31
Sandra	Rewrite	9	34	10	23
	Retell	9	34	15	28
Enrique	Rewrite	46	25	15	14
	Retell	53	26	15	38
Carmen	Rewrite	20	35	10	8
	Retell	15	35	10	7
Luis	Rewrite	30	15	14	25
	Retell	40	8	18	
Lupe	Rewrite	17	18	17	15
	Retell	8	18	18	13
Maria	Rewrite	31	30	15	11
	Retell	30	18	8	8

		Story				Report			
		English		Spanish		English		Spanish	
		M	(SD)	M	(SD)	M	(SD)	M	(SD)
All	Rewrite	30.6	(12.7)	28.2	(9.8)	16.5	(6.6)	20.1	(7.4)
	Retell	31.7	(16.8)	28.6	(12.6)	16.7	(8.2)	25.3	(10.8)
Top 3	Rewrite	43.7	(6.2)	27.8	(7.6)	24.0	(4.2)	22.5	(5.0)
	Retell	38.6	(17.1)	36.5	(16.4)	24.7	(2.9)	25.2	(3.4)
Bottom 3	Rewrite	25.8	(7.9)	20.8	(8.2)	15.6	(1.6)	17.3	(7.1)
	Retell	25.6	(16.4)	14.6	(5.6)	14.6	(5.6)	19.9	(16.7)

Within Subjects ANOVA

Effect	df	F	Sig
Mode	1;10	1.68	.224
Genre	1;10	12.20	.006
Language	1;10	0.04	.855
Interactions	4;40	1.49	.224

TABLE 7: Mean Percent Concepts Recalled in Levels II and III

	Story				Report			
	English		Spanish		English		Spanish	
	M	(SD)	M	(SD)	M	(SD)	M	(SD)
Level II Rewrite								
All	48.3	(24.8)	42.9	(16.0)	27.8	(12.8)	27.3	(18.3)
Top 3	66.7	(11.5)	47.7	(8.1)	39.0	(19.1)	46.0	(6.9)
Bottom 3	53.3	(11.5)	28.7	(14.5)	22.3	(9.2)	12.7	(12.5)
Level II Retell								
All	41.8	(18.9)	36.9	(19.6)	22.3	(7.9)	30.6	(18.1)
Top 3	40.0	(0.0)	38.3	(16.2)	27.7	(9.2)	46.3	(14.4)
Bottom 3	40.0	(20.0)	19.0	(8.7)	22.3	(9.2)	17.0	(19.3)
Level III Rewrite								
All	22.9	(10.4)	38.9	(14.1)	17.8	(11.0)	29.2	(14.4)
Top 3	28.0	(8.2)	41.0	(11.8)	33.3	(6.5)	40.0	(0.0)
Bottom 3	17.7	(7.6)	25.3	(11.7)	17.7	(4.0)	16.7	(5.8)
Level III Retell								
All	24.0	(10.9)	40.3	(14.5)	20.6	(14.8)	28.3	(16.4)
Top 3	28.0	(3.5)	46.0	(8.0)	37.7	(4.0)	50.0	(10.0)
Bottom 3	14.3	(5.8)	23.0	(8.0)	22.3	(16.6)	13.3	(5.8)

Within Subjects ANOVA

Effect	df	F	Sig
Level	1;10	21.26	.001
Mode	1;10	0.10	.757
Genre	1;10	9.86	.011
Language	1;10	0.85	.377
Level & Mode	1;10	4.07	.071
Level & Genre	1;10	8.79	.014
Level & Language	1;10	19.29	.001
Mode & Genre	1;10	0.55	.475
Mode & Language	1;10	0.47	.507
Genre & Language	1;10	0.03	.871
Higher Order Interactions	5;50	2.13	.078

TABLE 8: Deepest Levels of Student Recall

	Levels	Rewriting	Retelling
English Story			
	III		Lupe*
	IV		
	V	Lupe*, Agustin	Agustin
	VI	Javier, Blanca, Maria*, Luis*	Javier, Blanca, Maria*, Luis*
Spanish Story			
	III		
	IV		
	V	Agustin, Maria*, Luis*	Luis*
	VI		Agustin
	VII	Javier, Blanca, Lupe*	Javier, Blanca, Lupe*, Maria*
English Report			
	III		Lupe*, Maria*
	IV	Agustin	
	V		
	VI	Javier, Blanca, Maria*, Luis*, Lupe*	Javier, Blanca, Agustin, Luis*
	VII		
Spanish Report			
	III	Maria*	Maria*, Blanca
	IV	Javier, Blanca, Agustin, Luis*, Lupe*	Javier, Agustin, Luis*, Lupe*

* Indicates poorer envisionment makers

TABLE 9: Percent Response Type to Questions About Text Meanings

	Paraphrases	Synonyms	Translations	Definitions	Examples	Explanations	Combinations	Other
Jackie								

Blanca	28.6	0.0	0.0	0.0	28.6	14.3	14.3	14.2
Javier	14.3	0.0	0.0	28.6	14.3	14.3	28.6	0.0
Agustin	14.3	14.3	0.0	0.0	28.6	14.3	14.3	14.2
Luis	28.6	0.0	0.0	0.0	42.9	28.6	0.0	0.0
Lupe	28.6	0.0	28.6	0.0	14.3	14.3	14.3	0.0
Maria	42.9	0.0	0.0	0.0	14.3	42.8	0.0	0.0
Raul y Duque								

Blanca	0.0	0.0	57.1	0.0	0.0	0.0	14.3	28.6
Javier	14.3	14.3	0.0	14.3	0.0	0.0	0.0	57.1
Agustin	28.6	0.0	0.0	14.3	0.0	14.3	14.3	28.5
Luis	14.3	0.0	0.0	0.0	28.6	28.6	0.0	28.5
Lupe	14.3	0.0	57.1	0.0	0.0	0.0	0.0	28.6
Maria	14.3	0.0	0.0	14.3	0.0	28.6	14.3	28.5
Mole								

Blanca	28.6	14.3	0.0	0.0	0.0	14.3	0.0	42.8
Javier	0.0	0.0	0.0	0.0	14.3	14.3	14.3	57.1
Agustin	28.6	0.0	0.0	0.0	0.0	14.3	14.3	42.8
Luis	14.3	0.0	0.0	0.0	28.6	14.3	0.0	42.8
Lupe	0.0	14.3	0.0	0.0	0.0	28.6	0.0	57.1
Maria	0.0	0.0	0.0	0.0	14.3	28.6	0.0	57.1
Abejas								

Blanca	0.0	0.0	42.9	0.0	0.0	0.0	0.0	57.1
Javier	14.3	14.3	0.0	0.0	14.3	0.0	0.0	57.1
Agustin	42.9	0.0	0.0	0.0	0.0	14.3	0.0	42.8
Luis	0.0	0.0	0.0	0.0				
Lupe	0.0	0.0	42.9	0.0	14.3	0.0	0.0	85.7
Maria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	57.1
					0.0	42.9	0.0	57.1
All								
M	15.5	3.0	9.5	3.0	10.7	15.5	6.0	36.9
(SD)	(6.7)	(2.7)	(14.9)	(4.1)	(9.0)	(10.7)	(4.3)	(3.7)
Top 3								
M	17.9	4.8	8.3	4.8	8.3	9.5	9.5	36.9
(SD)	(9.5)	(2.1)	(14.4)	(5.5)	(2.1)	(4.1)	(2.0)	(5.4)
Bottom 3								
M	13.1	1.2	10.7	1.2	13.7	21.4	2.4	36.9
(SD)	(2.1)	(2.1)	(18.6)	(2.1)	(13.5)	(12.9)	(2.0)	(2.0)

TABLE 10: Performance of High and Low Envisionment Makers on Story and Report Probing Questions

	M	(SD)	t (high vs low)	P
English Story & Report			2.42	.037
All	2.57	(0.76)		
High	3.18	(0.93)		
Low	1.86	(0.21)		
Spanish Story & Report			2.88	.023
All	3.58	(0.60)		
High	3.80	(0.45)		
Low	2.79	(0.40)		
Total Story & Report			2.82	.024
All	3.10	(0.70)		
High	3.49	(0.57)		
Low	2.32	(0.29)		
Total English vs Spanish			6.67	.001

df = 5 English story and report; 5 Spanish story and report;
10 English vs Spanish; 4 total story and report.

TABLE 11: Comparison of Standardized Test Scores and Envisionment Ratings

	CTBS Scores		Envisionment*
	Reading	Language	
Blanca	60	60	4.5
Javier	22	24	3.5
Agusten	52	50	5.0
Teresa	1	17	2.5
Rosa	20	63	3.5
Pablo	26	31	3.5
Sandra	30	63	2.5
Enrique	20	25	3.0
Carmen	20	58	3.5
Luis	17	20	2.0
Lupe	17	29	2.0
Maria	13	15	2.5

* This score is an average of the English story and report envisionment ratings.

	Reading	Language	Envisionment
Reading	1.000	0.607	.788*
Language		1.000	0.533
Envisionment			1.000

* $P < .01$; $N = 12$

APPENDIX 1

STUDENT INTERVIEW SCHEDULE

Name_____ Date_____

Interviewer_____ St.#_____

STUDENT INTERVIEW-ENTREVISTA ESTUDIANTIL

Literacy

Reading/General

1. What are some of the things (reasons) you read at home? Can you give me some examples?
   ?Qué tipo de cosas lees en casa? ?Cuales son las razones por que lees en casa?

2. a. Why do you usually read at home?
      ?Porqué lees en casa?

   b. What types of things?
      ?Qué tipo de materia lees?

3. a. Why do you usually read in school?
      ?Porqué lees en la escuela?

   b. What types of things?
      ?Qué tipo de materia lees?

   c. Can you give me some examples of those things you read?
      ?Me puedes dar algunos ejemplos de las cosas/materias que lees?

4. a. Do you like to read?
?Te gusta leer?

b. What do you like about it?/what don't you like about it?
?Qué es lo que te gusta de la lectura?/?Qué no te gusta?

5. a. What do you like best about reading?
?Qué es lo que más te gusta de la lectura?

b. What do you like least about reading?
?Qué es lo que menos te gusta?

6. a. What do you think the easiest thing about reading is?
?Qué te parece lo más fácil/sencillo de leer?

b. The hardest?
?Qué te parece lo más difícil?

7. a. Are you a good reader?
?Eres bueno(a) para leer?

b. How can you tell?
?Cómo lo sabes?

8. What does it take to be a good reader?
?Qué es lo que se requiere para ser bueno(a) para leer?

9. If someone asked you to explain what reading was, what would you tell them?
Si alguien te preguntaría que cosa es la lectura (que cosa es saber leer), ?qué le dirías?

10. How does a person learn to read?
?Cómo aprende uno a leer?

11. What do you do at school that helps you to read?
?Qué es lo que haces en la escuela que te ayuda a leer?

12. What types of activities does a teacher do to help a student to learn to read?
?Qué tipo de actividades (cosas) hace una maestra para enseñer a leer a un estudiante?

Reading - Language

1. a. What languages do you read at home?

?Qué idiomas lees en casa?

b. Do you prefer reading in one language more than another at home?
?Prefieres leer en un idioma más que en otro?

c. Which?
?Cuál?

d. Why?
?Porqué?

e. Do you use Spanish for one kind of reading and English for another kind? What? Can you give me an example?
?Usas el español para leer un tipo de materia y el inglés para otro tipo? ?Para qué? ?Me puedes dar un ejemplo? ?Cómo qué?

2. a. What languages do you read at school?
?Qué idiomas usas en la escuela para leer?

b. Do you prefer reading in one language more than another at school?
En la escuela, ?prefieres usar un idioma más que otro?

c. Why?
?Porqué?

3. a. Is reading different in English or Spanish?
?Es diferente leer en inglés al leer en español?

b. How?
?Cómo?

c. Is it easier to read in English? Why?
?Es más fácil leer en inglés? ?Porqué?

d. Is it easier to read in Spanish? Why?
?Es más fácil leer en español? ?Porqué?

Writing-General

1. What are some of the reasons you write at home? Can you give me some examples?
?Cuales son algunas razones por que escribes en casa? ?Me puedes dar algunos ejemplos?

2. a. Why do you usually write at school?
?Cuales son algunas razones por que escribes en la escuela?

b. What types of things?
?Qué tipo de cosas? ?Me puedes dar unos ejemplos?

3. a. Do you like to write?
?Te gusta escribir?

b. Why?
?Porqué?

4. a. What do you like best about writing? How do you know?
?Qué es lo que más te gusta de escribir? ?Cómo lo sabes?

b. What do you like least about writing? Why?
?Qué es lo que menos te gusta? ?Porqué?

5. a. What do you think the easiest thing about writing is?
?Qué es lo más fácil de escribir?

b. The hardest?
?Lo más difícil?

6. What does it take to be a good writer?
?Qué es lo que se requiere/necesita para ser bueno(a) para

escribir?

7. If someone asked you to explain what writing was, what would you tell them?
Si alguien te preguntaría que le explicaras que cosa es escribir, ?qué le dirías?

8. What does a person have to do to learn to write?
?Qué es lo que tiene que hacer una persona para poder aprender a escribir?

9. What do you do at school that helps you to write?
?Qué es lo que haces en la escuela que te ayude a escribir?

10. What types of activities does a teacher do to help you to learn to write?
?Qué tipo de actividades da un(a) maestro(a) para enseñarle a un estudiante a escribir?

Writing-Language

1. a. What languages do you use to write at home?
?Qué idiomas escribes en casa?

b. Do you prefer writing in one language more than another at home?
?Prefieres usar un idioma sobre el otro?

c. Which?
?Cuál?

d. Why?
?Porqué?

e. Do you use Spanish for one kind of writing and English for another?
?Usas el español para escribir un tipo de cosas y el inglés para otro tipo?

2. a. What languages do you use to write at school?
?Qué idiomas usas en la escuela para escribir?

b. Do you prefer writing in one language more than another at school?
?En la escuela prefieres usar un idioma sobre el otro?

c. Why?
?Porqué?

3. a. Is it different to write in English and Spanish?
?Es diferente escribir en inglés al español?

b. How?
?Cómo?

c. Is it easier to write in English? How do you know this?
?Es más fácil escribir en inglés? ?Cómo lo sabes?

d. Is it easier to write in Spanish? Why? How do you know this?
?Es más fácil escribir en español? ?Porqué? ?Cómo los sabes?

Language

1. a. What language do you usually speak?
Generalmente, ?qué idiomas hablas?

b. At home?
?En casa?

c. At school?
?En la escuela?

2. a. Who do you usually speak Spanish to? Does it change in different situations? Give examples of when you change over.
Generalmente, ?con quién hablas español? ?Cambias el idioma en diferente situaciones? Dame unos ejemplos cuando haces el cambio.

b. Who do you usually speak English to?
Comúnmente, ?con quién hablas inglés?

Now I want to ask you questions about your family's language, reading and writing habits.
Ahora quiero hacerte algunas preguntas sobre el uso de idioma, lectura y escritura en tu familia.

3. a. Does anyone inyou family read in Spanish?
?Tienes algún miembro de la familia que lee en español?

b. Who?
?Quién?

c. What kinds of things?
?Qué tipo de cosas lee?

4. a. Does anyone in your family write in Spanish?
?Tienes algún miembro de la familia que escribe en español?

b. Who?
?Quién?

c. What kinds of things?
?Qué tipo de cosas escribe?

5. a. Does anyone in your family read in English?
?Tienes algún miembro de la familia que lee en inglés?

b. Who?
?Quién?

c. What kinds of things?
?Qué tipo de cosas lee?

6. a. Does anyone in your family write English?
?Tienes a alguien en tu familia que escribe el inglés?

b. Who?
?Quién?

c. What kinds of things?
?Qué tipo de cosas?

7. a. Did anyone in your family read in Spanish when you lived in Mexico?
Cuando vivías en México, ?tenías a alguien en tu familia que sabía leer en español?

b. Who?
?Quién?

c. What kinds of things?
?Qué tipo de cosas leía?

8. a. Did anyone in your family write in Spanish when you lived in Mexico?
Cuando vivías en México, tenías a alguien en tu familia que sabía escribir en español?

b. Who?
?Quién?

c. What kinds of things?
?Qué cosas escribía?

9. Did anyone in your family study English in Mexico Where?
?Estudió alguien de tu familia el inglés en México? ?En dónde?

10. a. Did anyone in your family read in English when you lived in Mexico?
Cuando vivías en México, ?tenías a alguien de la familia que leía el inglés?

b. Who?
?Quién?

c. What kinds of things?
?Qué cosas leía?

11. Did anyone in your family write in English when you lived in Mexico?
Who? What kinds of things?
En México, ?había alguien de tu familia que escribía en inglés?
?Quién? ?Qué cosas escribía?

Language and Thought

1. a. Do you understand most of what you read in English?
?Entiendes casi todo lo que lees en inglés?

b. In Spanish?
?En español?

2. a. Is it easier for you to tell people about what you've read in English? Why?
?Es más fácil explicarle a la gente lo qué has leído en inglés? ?Porqué?

b. Is it easier for you to tell people about what you've read in Spanish? Why?
?Es más fácil explicarle a la gente lo qué has leído en español? ?Porqué?

Now I went you to take some time to answer these next questions.
Ahora quiero que tomes tu tiempo para responder a las siguientes preguntas.

3. a. Do you ever have trouble reading and answering questions in English?
?En alguna ocasión has tenido dificultad para leer y contestar preguntes en inglés?

b. Why? What's the difficulty? Why do you think you have trouble?
?Porqué? ?Cuál es la dificultad? ?Porqué crees que tienes dificultades?

c. Do you ever have trouble reading and answering questions in Spanish? Why?
?En alguna ocasión has tenido dificultad para leer y contestar preguntas en español? ?Porqué?

d. What's the difficulty? Why do you think you have trouble?
?Cuál es la dificultad? ?Porqué crees que tienes dificultades?

4. What language do you think in usually?
?Generalmente, en qué idioma piensas?

a. At home?
?En casa?

b. At school?
?En la escuela?

5. a. When you read in Spanish, what language do you think in?
Cuando lees en español, ?en qué idioma piensas?

b. Is it always the same?
?Siempre es lo mismo?

c. When is it different? Can you give examples of when it changes?
?Cuándo es diferente? ?Me puedes dar unos ejemplos de cuando es diferente?

6. a. When you write in Spanish, what language do you think in?
Cuando escribes en español, ?en qué idioma piensas?

b. Is it always the same?
?Es siempre lo mismo?

c. When is it different?
?Cuándo es diferente?

7. a. When you read in English, what language do you think in?
Cuando lees en inglés, ?en qué idioma piensas?

b. Is it always the same?
?Siempre es lo mismo?

c. When is it different?
?Cuándo es diferente?

8. a. When you write in English, what language do you think in?
Cuando escribes en inglés, ?en que idioma piensas?

b. Is it always the same?
?Siempre es lo mismo?

c. When is it different?
?Cuándo es diferente?

9. a. Do you have trouble with English and Spanish mix-ups when you are at school?
?Hay ocasiones cuando confundes el inglés y el español en la escuela?

b. What kinds of trouble?
?En qué situaciones los confundes?

c. Do you have trouble with English and Spanish mix-ups when you are at home?
?Hay ocasiones cuando confundes el inglés y el español en casa?

d. What kinds of trouble?
?En qué situaciones los confundes?

Schooling

Schooling in Mexico

1. a. Did you read in Spanish when you lived in Mexico?
   ?Leías en español cuando vivías en México?

   b. What kinds of things?
   ?Qué tipo de cosas?

   c. At home or in school?
   ?En la escuela o en casa?

   d. How old were you when you learned to read in Spanish?
   ?Cuántos años tenías cuando aprendistes a leer en español?

2. a. How many years did you go to school in Mexico?
   Cuántos años asististe a la escuela en México?

   b. What grades?
   ?Hasta qué grado/año?

3. a. Tell me about your school in Mexico?
   Cuéntame algo de tu escuela en México.

b. What types of things did you read?
?Qué tipo de cosas leías?

c. What types of things did you write?
?Qué tipo de cosas escribías?

d. How is it different from the things you do here?
?Cómo es distinto a las cosas que haces aquí?

4. a. What did you like best about your school in Mexico?
?Qué te gustaba más de tu escuela en México?

b. Least?
?Lo menos?

5. a. What do you like best about your school here?
?Qué es lo que te gusta más de tu escuela aquí?

b. Least?
?Lo menos?

6. a. Do you think students were better writers in Mexico?
?Crees tú que los estudiantes eran mejor para escribir en México?

b. Why?
?Porqué?

7. a. When did you start school in the U.S.?
?Cuándo empezaste la escuela en los Estados Unidos?

b. How old were you?
?Cuántos años tenías?

c. What grade were you put in?
?En qué grado/año empezaste?

8. a. What was it like when you started school here?
?Cuál fué tu reacción cuando entraste a la escuela aquí?

b. What was hard for you?
?Qué es lo qué fué difícil para tí?

c. What was easy for you?
?Qué es lo qué fué fácil?

d. Do you still have trouble with some things in school now?
Todavía tienes problemas con algunas cosas en la escuela?

e. What and why?
?Con qué y porqué crees que es así?

9. a. Was school easier or harder for you in Mexico?
?Fué la escuela más fácil o más difícil para tí en México?

b. What parts?
?Qué partes?

c. Why?
?Porqué?

10. a. Do you think you are a better reader here than in Mexico?
?Crees tú ser mejor lector aquí que en México?

b. Why?
?Porqué?

c. Do you think you are a better writer here than in Mexico?
?Crees tú ser mejor escritor aquí que en México?

d. Why?
?Porqué?

APPENDIX 2

PASSAGES

Jackie

It was two weeks before school began when the new family moved in. With this new family came a new kid whom everyone was anxious to see. And it didn't take long before the new kid came out, saying "Hi, my name is Jackie."-----

"I am Larry."

"My name is Stephen."

"They call me John."

"What ya doin?" asked Jackie.

"We're playing King-o-the-Hill Stephen said. "Wanna play?"

"Ok," said Jackie.

Here was their chance to really "check the kid out," and they did. Jackie was "King" all afternoon.-----

"You're all right," said Larry.

"Yeah. Yuh wanna join our club?" asked Stephen.

"Ok, what do I have to do?" asked Jackie.

"See that red-brick house?" said Stephen. "All you have to do is go on the porch, pull the string, and turn the porch light out."

"What's so hard about that?" began Jackie.

"Well, there's this little dog in the yard," grinned John.

"Oh, I'm not afraid of dogs," said Jackie

"We'll see," said Stephen. "Go on, now, we haven't got all night."

Jackie crawled to the fence while the others watched, thinking, "This is gonna be easy." But looking over the fence, Jackie saw that the "little dog" was an oversized mutt.

"His name is Bear!" yelled John.

"Wonder why?" teased Jackie, trying to hide a sudden fright.

Whatever Jackie was going to do, it had to be done quickly. Jumping over the fence, Jackie counted to 10, ran up on the porch, and pulled the string. Jackie pulled and kicked with great force. Something ripped. Jackie fell over the fence and raced for the corner.-----

"Man," said Larry, "you just barely made it!"

"Yeah," said Jackie, trying to appear calm.

The next two weeks went by quickly. Stephen, Larry, John and Jackie were always roaming the neighborhood looking for something new. They played football. They made a scooter out of a crate and some old roller skates, and they decorated it with old bottle caps.

Finally, that day came. School was to start, and Larry, Stephen and John were waiting outside Jackie's house.

"Hurry up!" yelled John. "Wanna be late the first day?"

Just then, out came a skinny girl in a green dress with a green ribbon in her hair.

"Ok, I'm ready," she said.

"Who are you?" asked Stephen. "Tell Jackie to come out."

"I am Jackie," she said.

Larry, Stephen, and John just stood there, dead in their tracks. Larry finally spoke.

"Jackie, what are you doing with a dress on?"

"Mama wouldn't let me wear pants to school." answered Jackie.-----

The Mole

The mole is a small furry animal that lives underground. It makes mounds in people's lawns. The mounds are the roofs of its underground tunnels. A mole makes tunnels to hunt for food such as worms. It has a busy day hunting and eating.——

A mole doesn't weigh very much, but it must eat a lot. Every day, it eats about one half of its own weight in food.

The furry little mole is perfectly made for it's life of digging and living underground. It has short, stout, strong legs for pushing the dirt about. It can hear fairly well, but its tiny ears cannot be seen on the outside of its head. Larger ears would only get in its way when it was digging.

Since moles live their lives underground where it is dark, they have little use for sight. Their eyes are very small, and the animals can "see" only light and dark. Moles do not like the light and they stay away from it if they can.

The mole can travel easily in both directions. Because its short furry coat brushes both ways, it can travel back and forth. When it is going ahead, it feels its way with its nose. The hairs on its front feet, or "hands," also help to signal direction. When it is going back, its tail "tells" it which way to go.——

Moles tunnel in the soft, wet soil, where there are plenty of worms and insects. Usually two kinds of diggings are made--a home tunnel and a food tunnel.

The home tunnel may be dug two feet below ground. This is where the mole lives. The tunnel that is dug nearer the surface--the one that makes a mound on your lawn--is a food tunnel. If there is not much food along a surface tunnel, it is used only once. But usually there are plenty of worms nearby.

In the surface tunnel, the mole kicks and pushes the dirt to one side as it makes its way. The animal may burrow 12 to 15 feet in an hour! Some of the time is spent in resting and eating, of course, but it is something to think about! ———

Raul y Duque *
Raul and Duke

Once there was an eleven-year old boy named Raul. For his birthday his parents gave him, for the first time, a puppy. The puppy's name was Duke.

When Duke arrived at Raul's house it was love at first sight. It appeared as if the two already had known each other for a long time and were old friends. Duke and Raul became inseparable; one was never without the other and only when Raul attended school did he leave Duke. In the afternoon when he returned, Duke would be waiting for him at the corner and they were together once again.

Some afternoons they would go on walks near the river's edge. On those occasions Raul would talk to Duke and share with him his deepest secrets. He appeared to understand him. He would look at the boy with large expressive eyes and at times appeared to want to speak. Raul was mischievous and every time he attempted to do some mischief Duke would bark excitedly as if wanting to stop him.

One day Raul climbed onto the house's roof. Although it was very high and slippery, Raul had no difficulties climbing it. From high atop, Raul could see Duke who anxiously looked at him; he would bark and cry out as if begging him to come down. Raul enjoyed himself without realizing the danger he was in. Finally, he decided to come down, but in the rush his pants became caught on the roof and he slipped. He stayed there hanging only by his hands. He couldn't begin to imagine the type of punishment his parents would give him. Duke stood on his hind legs and barked desperately and he ran around the house as if wanting to reach the roof.

Suddenly Raul remembered that his mother wasn't home, but dona Maria's house next door. How long would he have to hang there? How long would he have to hold on until his parents looked for him? He was thinking these thoughts when he noticed that Duke had disappeared.

"Duke, Duke, come here!" but the dog did not reappear.

A good period of time went by with no one coming to his rescue. He felt his pants beginning to tear. Without a doubt, if he fell he would break at least an arm or a leg. Suddenly he heard voices, among them his mother's:

"Raulito, Raulito! Where are you?" yelled his mother.

"Here I am mother, here I am!," yelled Raul.

In those instants, he felt he was going to fall and that his strength abandoned him. "Mother, Mother! I'm falling!" he yelled loudly.

Like a streak of lighting Duke ran and positioned himself under Raul. Before Raul realized what was happening, dona Maria and his mother had caught him before he fell to the ground. Duke licked his face.

"Raulito, thank God that you're alright," said his mother.

His mother and the neighbor took him into the house; they laid him on the sofa and examined him to check if he had broken anything.

- - - -

After this incident Raul did not dare do more mischief. Duke took good care of him. Every time he thought the little boy was in danger he'd growl angrily and would bark until Raul stopped his mischief. Duke and Raul shared many happy hours. Raul couldn't have a better companion.

Las Abejas *

Bees

Bees are hardworking insects that produce honey and wax. Bees live together in a dwelling called a beehive. Inside the beehive, they build small rooms of wax called cells. When they have built many cells, they fill them up with honey.

Bees make honey with the nectar they gather when they land on a flower. They then fly to the beehive and pour the honey in the little cells. Later, they return for more. They make one trip after another until they finish. When they finish working for the day, they rest. Next day they continue flying from the beehive to the flowers and from the flowers to the beehive.

Bees are small. This is why they carry only very little nectar at a time. Since they are persistent, however, they are able to fill all the cells with honey.

Bees have strong jaws to open up the flowers and a beak to suck up the nectar. At the bottom of their abdomen they have a stinger that helps them to defend themselves.

Sometimes, other insects attempt to enter the beehive to eat the honey. The bees who guard the entrance fight off the thief. They pierce it with the stinger and inject a poison that kills the invader. Bees can also sting animals or people who disturb them. Bees should not be frightened or disturbed. That way they can fly off in search of food without causing harm.

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* This is a translation. Students read the original Spanish text.

APPENDIX 3

ENVISIONMENT QUESTIONS

(All questions were prepared in English and Spanish. We have included only the English questions here.)

LLOMAS PROJECT

EES

Jackie

I.

1. What have you learned that is happening so far? (e)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be? (TxH>)
4. How do you think it will end? (CGH>)
5. What do you think it means to say <u>with this family came a new kid everyone was anxious to see</u>? (TM)

II.

1. Tell me everything you now know from what you've just read. (e)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be? (TxH>)
4. How do you think it will end? (CGH>)
5. What does it mean to say <u>Here was their chance to check the kid out</u>. (TM)

x. I saw you had trouble with x. How can (did) you figure out what it means.

III.

1. What is happening now? (e)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be (TxH>)
4. How do you think it will end? (CGH>)
5. What do you think it means to say <u>something ripped</u>? (VM)

x. I saw you had trouble with x. How can (did) you figure out what it means.

IV.

1. Tell me everything you now know from what you've read. (e)
2 Did it end the way you thought it would (CGH<)
3. What did it mean to say <u>Mama wouldn't let me</u> wear pants to school? (TM)
4. Did anything you read remind you of something that happened to you or someone you know? What? Did you think about it when you were reading? What did you think? (SP)

Reading Probes

V.

Retelling: Now tell me everything you remember about what you read.

VI.

Writing: Now, let's see you write everything you remember about what you read --so the children in your class who won't be able to read this piece will know what it is about.

Writing Probes

LLOMAS PROJECT

EER

The Mole

I.
1. What have you learned so far from what you've read? (e)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be? (TxH>)
4. How do you think it will end? (CGH>)
5. What do you think it means a mole makes tunnels to hunt for food? (TM)

II.

1. What do you know now? (e)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be? (TxH>)
4. How do you think it will end? (CGH>)
5. What do you think it means to say Its tail tells it which way to go? (TM)
x. I saw you had trouble with x. How can (did) you figure out what it means?

III.

1. Tell me everything you know from what you've just read. (e)
2. Did it end the way you thought it would? Why? (CGH<)
3. What did it mean to say The animal may burrow 12 to 15 feet in an hour? (TM)
4. Did anything you read remind you of something you already know? Did you think about it when you were reading? What did you think? (SP)

Reading Probes

IV.

Retelling: Now, tell me everything you remember about what you read.

V.

Writing: Now, let's see you write everything you remember about what you read --so the children in your class who won't be able to read this piece will know what its about.

Writing Probes

LLOMAS PROJECT

SES

Raul and Duke

I.

1. What have you learned about what is happening so far? (e)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be? (TxH>)
4. How do you think it will end? (CGH>)
5. What do you think it means to say his parents gave him, for the first time, a puppy named Duke? (TM)

II.

1. Tell me everything you now know from what you just read. (e)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be? (TxH>)
4. How do you think it will end? (CGH>)
5. What does it mean to say Raul was mischievous? (TM)
x. I saw you had trouble with x. How can (did) you figure out what it means?

III.

1. What is happening now? (H|)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be? (TxH>)
4. How do you think it will end? (CGH>)
5. What do you think it means to say he managed to cling to the roof? (TM)
x. I saw you had trouble with x. How can (did) you figure out what it means?

IV.

1. Tell me everything you now know from what you've read? (e)
2. Did it end the way you thought it would? Why? (CGH<)
3. What does it mean to say Raul couldn't have a better companion? (TM)
4. Did anything you read remind you of something that happened to you or someone you know? What? did you think about it when you were reading? What did you think? (SP)

Reading Probes

V.

Retelling: Now tell me everything you remember about what you read.

VI.

Writing: Now let's see you write everything you remember about what you read -- so the children in your class who won't be able to read this piece will know what its about.

Writing Probes

LLOMAS PROJECT

SER

Bees

I.

1. What have you learned from what you've read so far? (e)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be? (TxH>)
4. How do you think it will end? (CGH>)
5. What do you think <u>small rooms of wax</u> means? (TM)

II.

1. What do you know now? (e)
2. What do you think you will read about next? (CGH>)
3. What do you think the next few words will be? (TxH)
4. How do you think it will end? (CGH>)
5. What do you think it means to say <u>they are persistent, they are able to fill all the (??) with honey</u>? (TM)

x. I saw you had trouble with x. How can (did) you figure out what it means?

III.

1. Tell me everything you know from what you've just read. (e)
2. Did it end the way you thought it would? Why? (CGH<)
3. What did it mean to say <u>Bees should not be frightened or disturbed</u>? (TM)
4. Did anything you read remind you of something you already knew? What? Did you think about it when you were reading? What did you think? (SP)

Reading Probes

IV.

Retelling: Now, tell me everything you remember about what you read.

V.

Writing: Now let's see you write everything you remember about what you read -- so the children in your class who won't be able to read this piece will know what it is about.

Writing Probes

APPENDIX 4

PROBING QUESTIONS

T2

PROBING QUESTIONS--Reading

Name_____ Student Number ____

Total Reading Score %
Total Language %ile

Story-1 Report-2
Reading-1 Writing-2
TA-1 R-2
Passage 3-1 Passage 6-2

GENRE

1. What kind of writing is this piece you just read? K_3 T
   ? COMO LE LLAMARIAS AL ESTILO DE ESCRITURA QUE ACABAS DE LEER?

2. How do you know? K_3 M
   ?COMO LO SABES? ?PORQUE LO DICES?

3. Have you read this type of piece before? K_2 E (already identified genre)
   ?HAS LEIDO ANTES ESTE TIPO DE LECTURA ANTES?
   ?HAS LEIDO ANTES ALGO PARECIDO?

4. Do you read this type of piece often? K_2 E
   ?LEES ESTE TIPO DE LECTURA CON FRECUENCIA?

5. Was this a typical (piece)? K_2 T
   ?ES TIPICA ESTA PIEZA?

6. In this kind of piece, is the content usually in a certain order? What order? K_2 T / K_2 T
   EN ESTE TIPO DE LECTURA, ?ESTA EL CONTENIDO EN CIERTA ORDEN?
   ? EN QUE ORDEN ESTA?

7. What order was used in the piece you just read? K_1 T
   ?EN QUE ORDEN ESTABA LO QUE ACABAS DE LEER?

E

8. Were there any parts (sections or content) you didn't expect? K,ET
?HUBIERON PARTES (SECCIONES O CONTENIDO) QUE NO ESPERABAS (QUE TE TOMARON POR SORPRESA?

9. What was the writer's reason for writing this? K,M
?PORQUE CREES QUE EL AUTOR/LA AUTORA ESCRIBIO ESTO?

10. What is the usual beginning for a "piece" like the one you have just read? K2T
GENERALMENTE, ?COMO EMPIEZA UNA LECTURA COMO LA QUE ACABAS DE LEER?

11. Did the one you just read have that beginning? K,T
?EMPEZO ASI LA QUE ACABAS DE LEER?

12. What is the usual ending for a "piece" like the one you have just read? K2T
GENERALMENTE, ?COMO TERMINA UNA LECTURA COMO LA QUE ACABAS DE LEER?

13. Did the one you just read have that ending? K,T
?TERMINO ASI LA QUE ACABAS DE LEER?

14. Which parts/sections in the piece you just read were harder for you than the others? Why? K,E K,EM
?HUBIERON PARTES/SECCIONES DE LA LECTURA QUE FUERON MAS DIFICILES QUE LAS OTRAS? ?CUALES? ?PORQUE?

15. Which parts were easier for you than the others? Why? K,E K,EM
?CUALES FUERON MAS FACILES QUE LAS OTRAS? ?PORQUE?

16. Who do you think the author wrote this piece for? K,M
?PARA QUIEN ESCRIBIO ESTO EL AUTOR?

17. Who do you think the author is? K,M
?QUIEN CREES QUE ES EL AUTOR?

18. Did you ever think about the author when you were reading this piece? When? What did you think?
EN ALGUNA OCASION MIENTRAS LEIAS, ? PENSASTE EN EL AUTOR? ?CUANDO? ?QUE PENSASTES? K, E

19. Would this piece have been different if the author had written it for a different audience?
?SERIA DIFERENTE ESTA LECTURA SI EL AUTOR LA HUBIERA ESCRITO PARA OTRO TIPO DE LECTOR? K_2 TM

20. How would it have been different?
?EN QUE SENTIDO SERIA DIFERENTE?
?COMO SERIA DIFERENTE? K_2 M

21. What did the author want the reader to think or feel or know when reading this piece?
?QUE QUIERE EL AUTOR QUE EL LECTOR PIENSE O SIENTA O SEPA CUANDO ESTA LEYENDO ESTA LECTURA? K_1 M

22. Was the author able to do it?
? CONSIGIO EL AUTOR HACER AL LECTOR QUE SINTIERA ESTO? K_1 M

23. What did the author do to get the reader to feel that way?
?QUE HIZO EL AUTOR PARA QUE EL LECTOR SINTIERA ESTO? K_2 M

<u>Organization</u>

24. Was this piece easy for you to read?
?FUE FACIL PARA TI LEER ESTO? K_1 E

25. What problems did you have reading this piece?
?QUE PROBLEMAS TUVISTE MIENTRAS LEIAS? K_1 E

26. When you are reading, how do you know what to think next?
CUANDO LEES, ?COMO SABES LO QUE DEBES DE PENSAR EN ADELANTE? K_1 EM

27. Since the beginning, did you have a feeling you knew what the piece was going to be about? $K_1 E M$
DESDE QUE EMPEZASTES A LEER, ?TENIAS YA UNA IDEA DE LO QUE SE IBA A TRATAR?

28. What were you thinking about? K, M
?QUE FUE LO QUE PENSABAS?

29. In the piece you have just read, could the parts be switched around? K, T
EN LA LECTURA QUE ACABAS DE LEER, ?SE PUEDE CAMBIAR LA ORDEN DE LAS PARTES/SECCIONES?

30. How would switching them change the piece? $K_2 T M$
?COMO CAMBIARIA LA LECTURA SI CAMBIARAS LA ORDEN?

31. Did you read the title for the piece? K, E
?LEISTE EL TITULO DE LA LECTURA?

32. When did you read it? K, E
?CUANDO LO LEISTE?

33. When reading, do you ever think about the title? $K_4 E$
CUANDO LEES, ?PIENSAS EN EL TITULO EN ALGUNA OCASION MIENTRAS LEES?

34. When do you generally think about the title? $K_4 E$
GENERALMENTE, ?CUANDO PIENSAS EN EL TITULO?

35. Did this title help you when you were reading? $K, E M$
?ACASO TE AYUDA EL TITULO CUANDO ESTAS LEYENDO?

36. How does the title usually help you? $K_4 E M$
GENERALMENTE, ?COMO TE AYUDA EL TITULO?

Language

37. Were any ideas or words difficult for you in the piece you just read?
?HUBIERON IDEAS O PALABRAS DIFICILES PARA TI EN ESTA LECTURA? K, EL

38. Which?
?CUALES? K, EL

39. Why did you find them difficult?
?PORQUE LAS ENCONTRASTES DIFICILES? K, M

40. What did you do when you encountered these difficult words or ideas?
?QUE HICISTES CUANDO TUVISTES DIFICULTADES CON PALABRAS O IDEAS? K, EL

41. Did you change any words or ideas after you had finished reading?
DESPUES QUE TERMINASTES DE LEER, ?CAMBIASTE DE OPINION SOBRE PALABRAS O IDEAS EN LA LECTURA. K, EL

42. When you read, did you say the words to yourself in Spanish or English?
MIENTRAS LEIAS, ?DECIAS LAS PALABRAS PARA TI MISMO EN ESPANOL O EN INGLES? K, EL

43. Did ideas come to you in Spanish or English?
?EN QUE IDIOMA TE YENIAN LAS IDEAS? ?EN ESPANOL O EN INGLES? K, EL

44. When the reading was difficult for you, did you think in Spanish or English? Did that help you? Tell me about it?
CUANDO SE TE HACIA DIFICIL LA LECTURA, ?PENSABAS EN ESPANOL O INGLES? ?TE AYUDA HACER ESO? CUENTAME. (?) K_2EL/K_2ML K, M

45. When you finished reading the piece, did you think about it in Spanish or English? What did you think? Do you usually use Spanish and English this way when you read in school? At home? Tell me about it.
DESPUES DE TERMINAR DE LEER ESTA PIEZA, ?TE ACORDASTE DE LA LECTURA EN ESPANOL O EN INGLES? ?QUE PENSASTES? EN GENERAL USAS ASI EL ESPANOL Y EL INGLES CUANDO LEES EN LA ESCUELA? EN CASA? CUENTAME. (?) K, EL/K, ML K, E, (?) K_4EL/K_4ML

Content

46. Did you already know something about the topic you just read about? K, M
SABIAS YA ALGO DE LO QUE ACABAS DE LEER?

47. Did you think of this experience/knowledge when you were reading? K, M
?PENSASTES EN LO QUE SABIAS MIENTRAS LEIAS?

48. Did you think of or learn anything new from reading this? What? K_2, II
?PENSASTES ALGO NUEVO O APRENDISTES ALGO NUEVO DESPUES DE LEER ESTO? ?QUE?

49. Did knowing something about this topic help you understand it? K, M
?TE AYUDO EN ALGO SABER ALGO SOBRE LO QUE ACABAS DE LEER PARA MEJOR ENTENDERLO?

50. Did you think there were any mistakes or problems in the information you just read? K_2 M
What? K_1 M
EN ALGUNA OCASION, PENSASTES QUE LA INFORMACION EN LA LECTURA TUVIERA ERRORES O PROBLEMAS?

51. How did you plan what to read? K, EM
?COMO PLANEASTE LO QUE IBAS A LEER?

APPENDIX 5

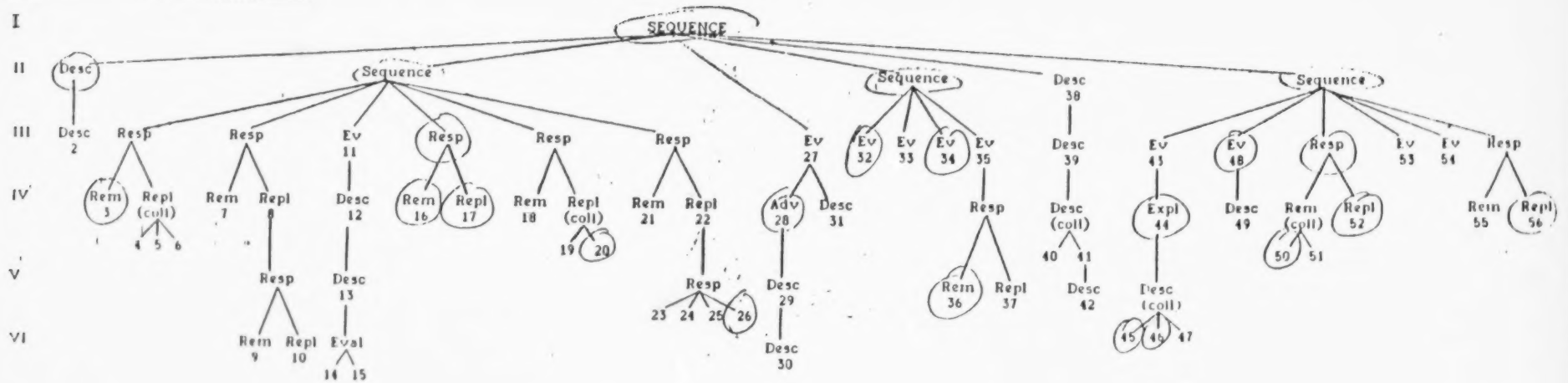
TREE DIAGRAMS FOR ANALYSIS OF RECALLS

Paper *____

Recall____ Writing ✓

Words 167 T-units 22

Gist____ Not inconsistent____



JACKIE

114

115

And the big kid knew he supposed to do is join the club (6) - generalization from specifics
but was not a little dog (8) - Inference
then he went to pull it (10) - [illegible] from specifics

He raised fast (11) — Inference (= "fast")

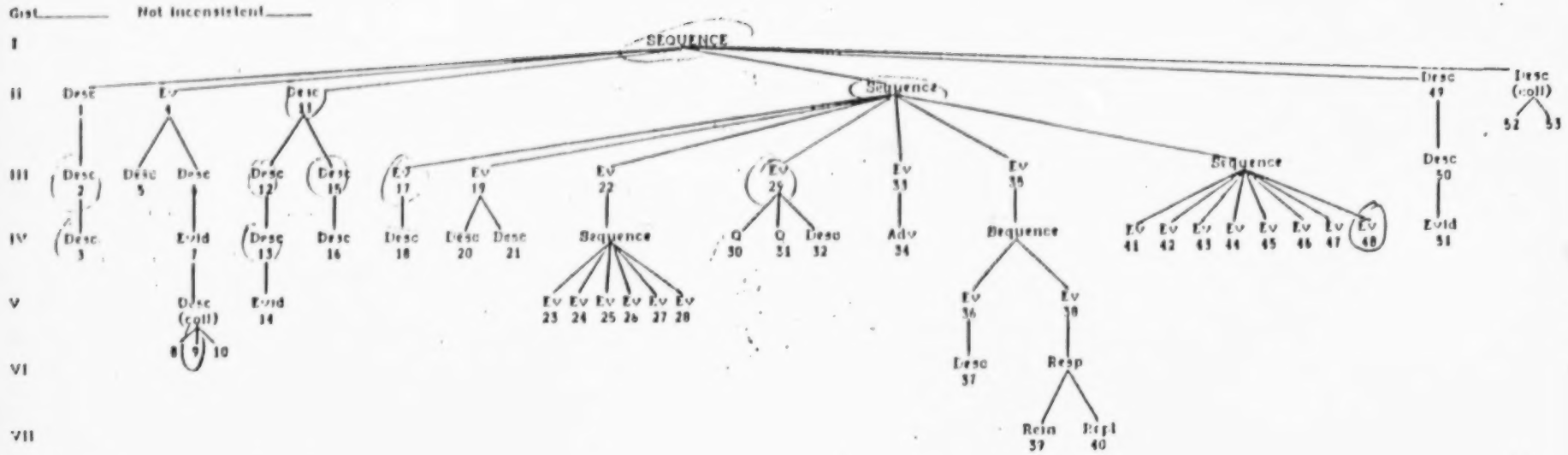
And the kids said your not Jackie (21).

Paper #____

Recall ✓ Writing____

Words 160 T-units 12

Gist____ Not Inconsistent____

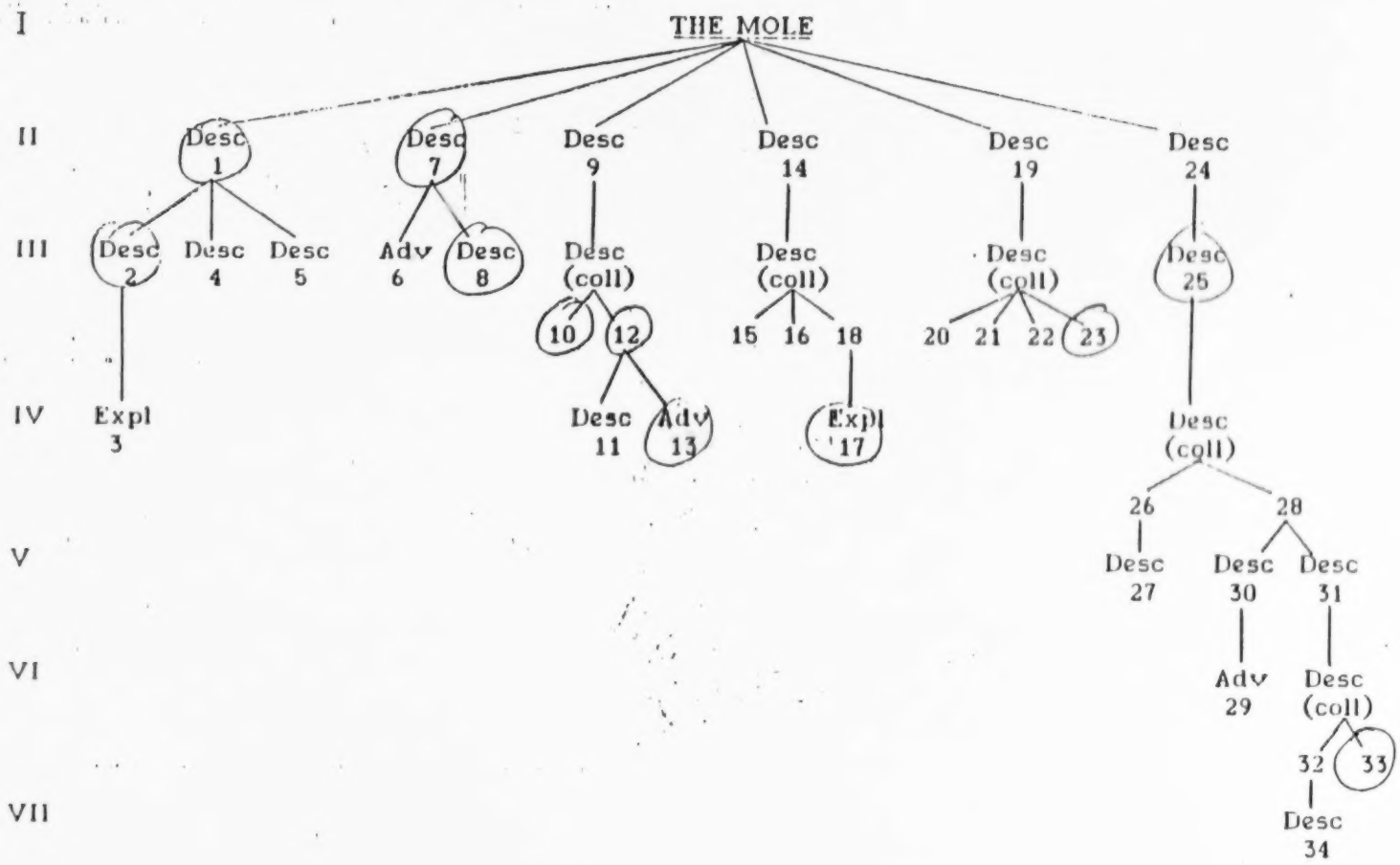


Paper #_____

Recall ✓ Writing_____

Words 102 T-units 14

Gist_____ Not inconsistent_____



It eats insects. (4) – Inference, not in text

They barely can hear (9) – Inaccurate

Paper #____ 1

Recall____ Writing____

Words 55 T-units 7

Gist____ Not Inconsistent____

double recall by restating full subject "the bees"

adds: "large amount" (4)